PMC-D307

SERVICE MANUAL

Canadian Model
E Model

Ver 1.0 1999. 05

CD Section	Model Name Using Similar Mechanism	PMC-D305
	CD Mechanism Type	KSM-213CDM
	Optical Pick-up Name	KSS-213C
Tape Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	MF-D307

SPECIFICATIONS

CD player section

System
Compact disc digital audio system
Laser diode properties
Material: GaAlAs
Wave length: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 µW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
2
Frequency response
20 - 20,000 Hz +1/–2.5 dB
Wow and flutter
Below measurable limit

Radio section

Frequency range
FM: 87.6 - 108 MHz
AM: 530 - 1,710 kHz
Aerials
FM: Lead aerial
AM: External aerial terminal

Cassette-corder section

Recording system
4-track 2 channel stereo
Fast winding time
Approx. 130 s (sec.) with Sony cassette C-60
Frequency response
TYPE I (normal): 40 - 15,000 Hz

General

Speaker
Full range: 8 cm (3 1/4 in.) dia., 6.0 ohms, cone type × 2
Input
LINE IN jack (stereo minijack)
Minimum input level 250 mV
Outputs
Headphones jack (stereo minijack)
For 16 - 68 ohms impedance headphones
LINE OUT jack (stereo minijack)
Rated output level 440 mV at load impedance 47 kilohms
Optical digital output (optical output connector)
Wave length: 630 - 690 nm
Power output
10 W + 10 W (at 6.0 ohms, 10% harmonic distortion)
Power requirements
For personal component system:
120 V AC, 60 Hz
For remote commander:
3 V DC, 2 size AA (R6) batteries

– Continued on next page –

PERSONAL COMPONENT SYSTEM

MICROFILM

SONY®

Power consumption
AC 35 W
Dimensions (incl. projecting parts)
Player: approx. 130 × 211 × 200 mm (w/h/d)
(5 1/8 × 8 3/8 × 7 7/8 inches)
Left speaker: approx. 130 × 210 × 235 mm
(w/h/d) (5 1/8 × 8 3/8 × 9 3/8 inches)
Right speaker: approx. 130 × 210 × 200 mm
(w/h/d) (5 1/8 × 8 3/8 × 7 7/8 inches)
Mass
Player: approx. 1.7 kg (3 lb. 12 oz.)
Left speaker: approx. 3.2 kg (7 lb. 1 oz.)
Right speaker: approx. 1.6 kg (3 lb. 9 oz.)
Supplied accessories
Remote commander RMT-C305A (1)
AM loop aerial (1)
Audio connecting cord (1)
Slip stoppers (8)

Design and specifications are subject to change without notice.

TABLE OF CONTENTS

1. SERVICING NOTES 3

2. GENERAL
2-1. Location of Controls 4

3. DISASSEMBLY
3-1. Cabinet (Rear) 5
3-2. Case (Lower) Section 6
3-3. Tape Mechanism Deck Section 6
3-4. Cabinet (CD) Section 7
3-5. CD, Control Board 7
3-6. Optical Pick-up Section 8
3-7. Rear Chassis (Speaker) Section 8
3-8. Amplifier, Terminal, Jack Board 9
3-9. Power Board 9

4. MECHANICAL ADJUSTMENTS 10

5. ELECTRICAL ADJUSTMENTS
Tape Section 10
Tuner Section 12
CD Section 14

6. DIAGRAMS
6-1. IC Pin Description 18
6-2. Circuit Boards Location 20
6-3. Block Diagram –Tuner Section– 21
6-4. Block Diagram –CD Section– 23
6-5. Block Diagram –Tape Section– 25
6-6. Printed Wiring Board –Tuner Section– 27
6-7. Schematic Diagram –Tuner Section– 29
6-8. Printed Wiring Boards –CD Section– 31
6-9. Schematic Diagram –CD Section– 33
6-10. Printed Wiring Boards –Main Section– 36
6-11. Schematic Diagram –Main Section– 39
6-12. Printed Wiring Boards –Control Section– 42
6-13. Schematic Diagram –Control Section– 45
6-14. Printed Wiring Boards –Power Amplifier Section– 47
6-15. Schematic Diagram –Power Amplifier Section– 49

7. EXPLODED VIEWS
7-1. Case Section 55
7-2. Cabinet (Front) Section 56
7-3. Cabinet (CD) Section 57
7-4. Optical Pick-up Section 58
7-5. Tape Mechanism Deck Section-1 59
7-6. Tape Mechanism Deck Section-2 60
7-7. Speaker (L) Section 61
7-8. Speaker (R) Section 62

8. ELECTRICAL PARTS LIST 63

SECTION 1
SERVICING NOTES

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

SAFETY-RELATED COMPONENT WARNING!!

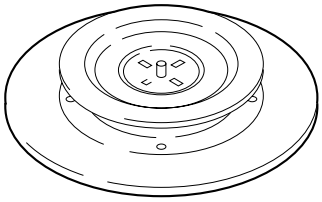
COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

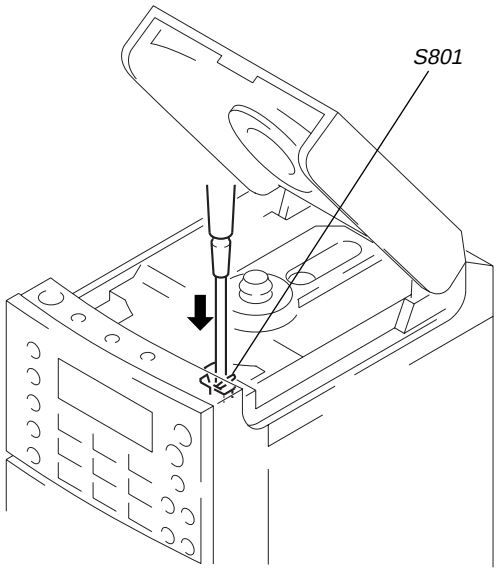
CHUCK PLATE JIG ON REPAIRING

On repairing CD section, playing a disc without the lid (CD), use Chuck Plate Jig.
• Code number of Chuck Plate Jig: X-4918-255-1



LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Turn POWER switch on with to disc inserted and press FUNCTION button to CD position.
2. Open the lid (CD).
3. Turn on S801 as following figure.
4. Press the ► (CD) button.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
   Objective lens moves up and down three times for focus search.



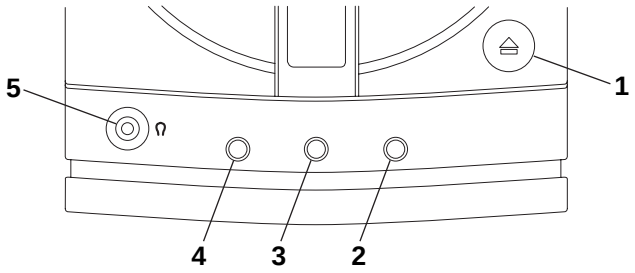
HOW TO CHANGE THE FM CERAMIC FILTERS

This model is used three ceramic filters of CF1, 2 and CF3.
Therefore, the ceramic filters must change three pieces together since it's supply three pieces in one package as a spare parts.

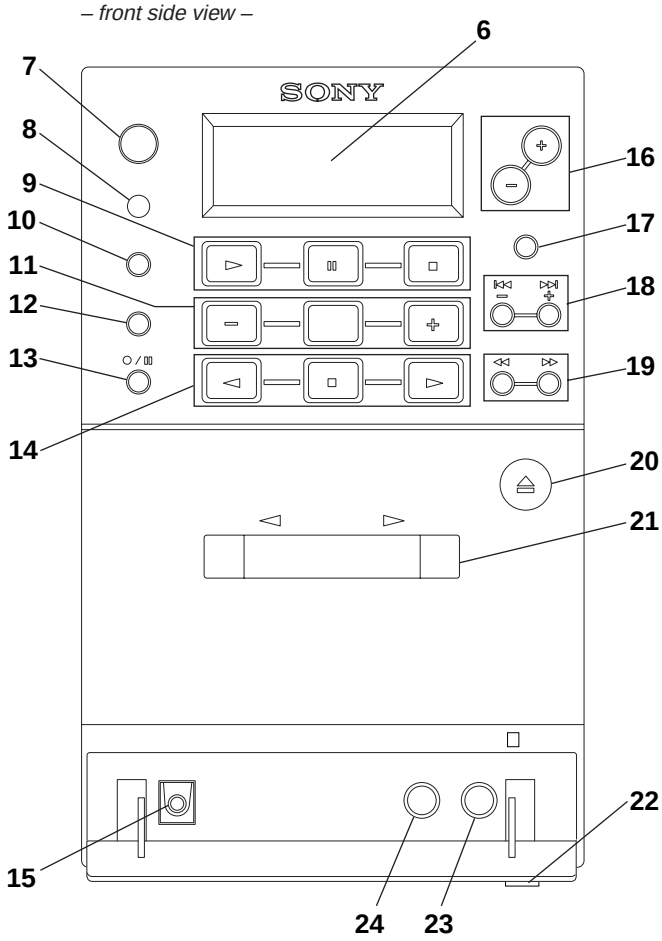
SECTION 2
GENERAL

2-1. LOCATION OF CONTROLS

– upper side view –



– front side view –



1. ⏏ OPEN/CLOSE (CD) button
2. PLAY MODE MONO/ST/ISS button
3. PGM SET/AUTO PRESET button
4. SOUND button
5. ∩ (Headphones) jack
6. Display window
7. POWER button
8. Remote sensor window
9. CD operation buttons
   ► (Play) button
   ❚❚ (Pause) button
   ■ (Stop) button
10. FUNCTION button
11. RADIO operation buttons
    PRESET – button
    BAND button
    PRESET + button
12. DIR MODE button
13. ●/❚❚ (Recording/pause) button
14. TAPE operation buttons
    ◄ (Reverse) button
    ■ (Stop) button
    ► (Play) button
15. OPTICAL DIGITAL OUT (CD) jack
16. VOLUME +/– button
17. DISPLAY/ENTER button
18. I◄◄/►►I, TUNE +/– button
19. ◄◄/►► button
20. ⏏ PUSH (cassette holder open) button
21. Cassette holder
22. OPEN ▼ knob
23. LINE OUT jack
24. LINE IN jack

SECTION 3
DISASSEMBLY

• The equipment can be removed using the following procedure.

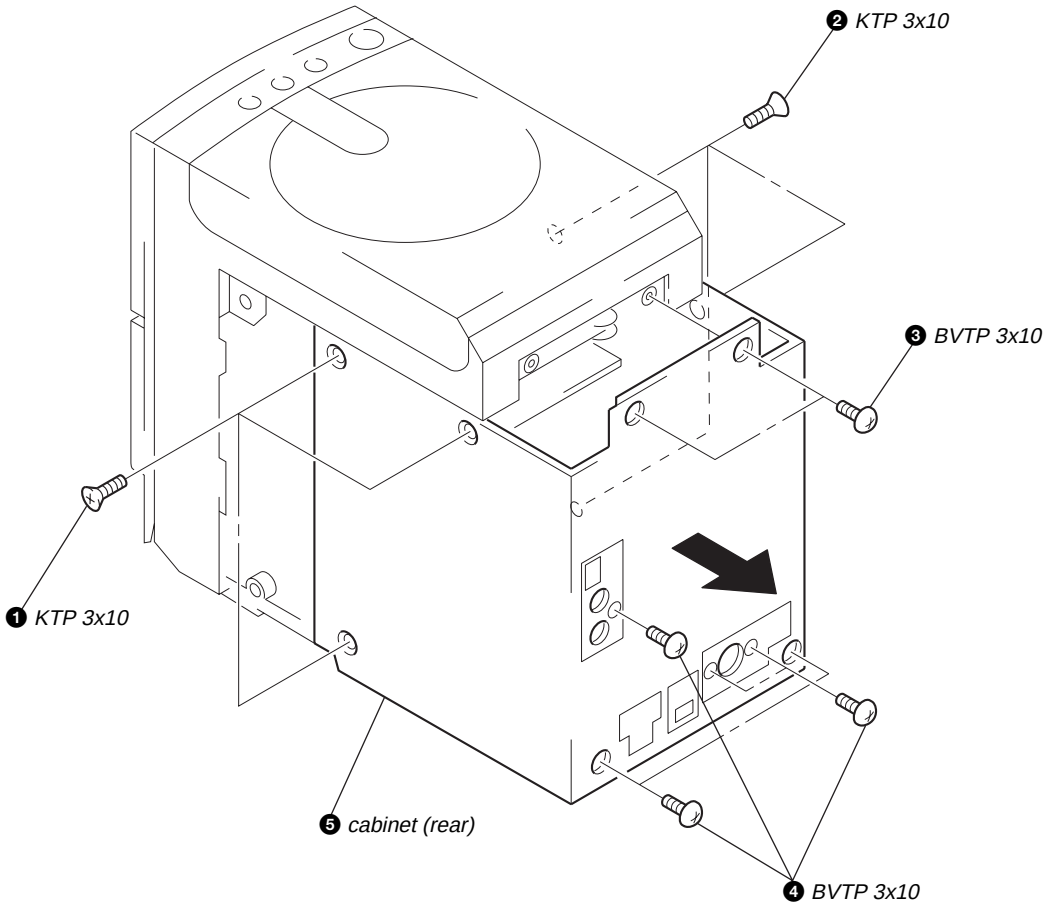
Set → Cabinet (rear) → Case (lower) section → Cabinet (CD) section → CD, Control board → Optical pick-up section

Case (lower) section → Tape mechanism deck section

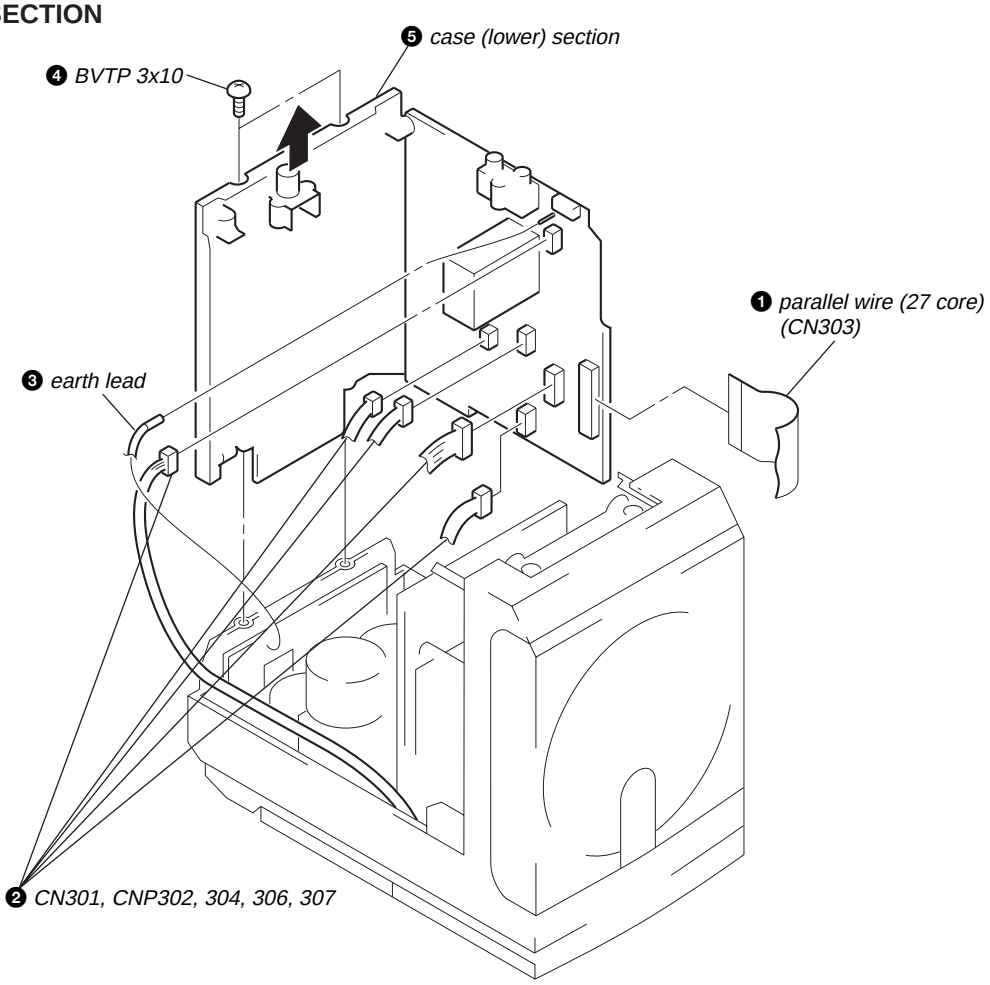
Set → Rear chassis (speaker) section → Amplifier, terminal, jack board → Power board

Note : Follow the disassembly procedure in the numerical order given.

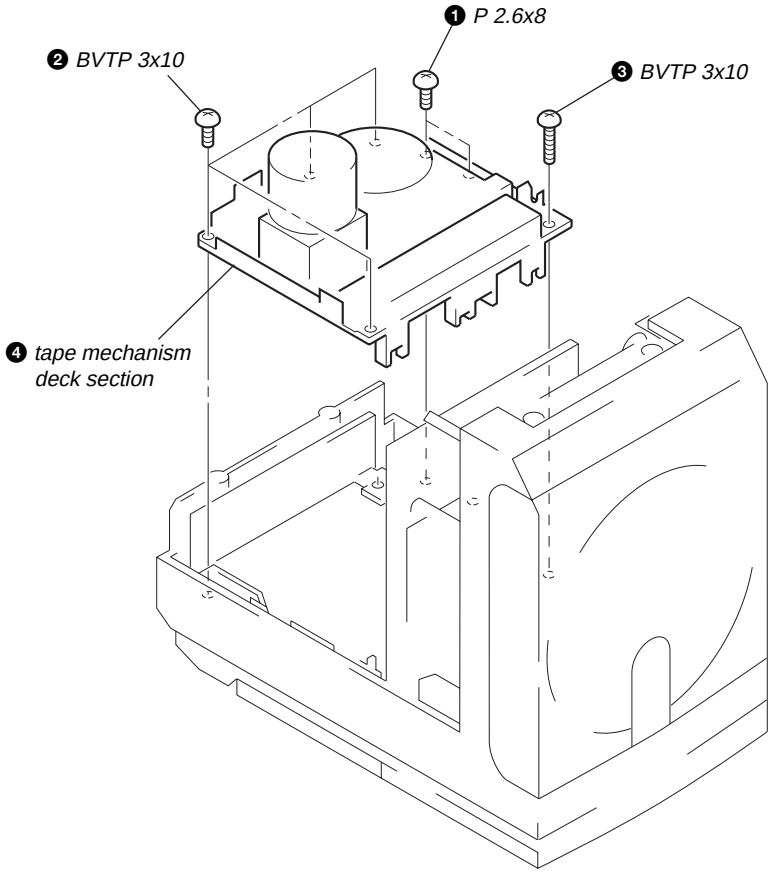
3-1. CABINET (REAR)



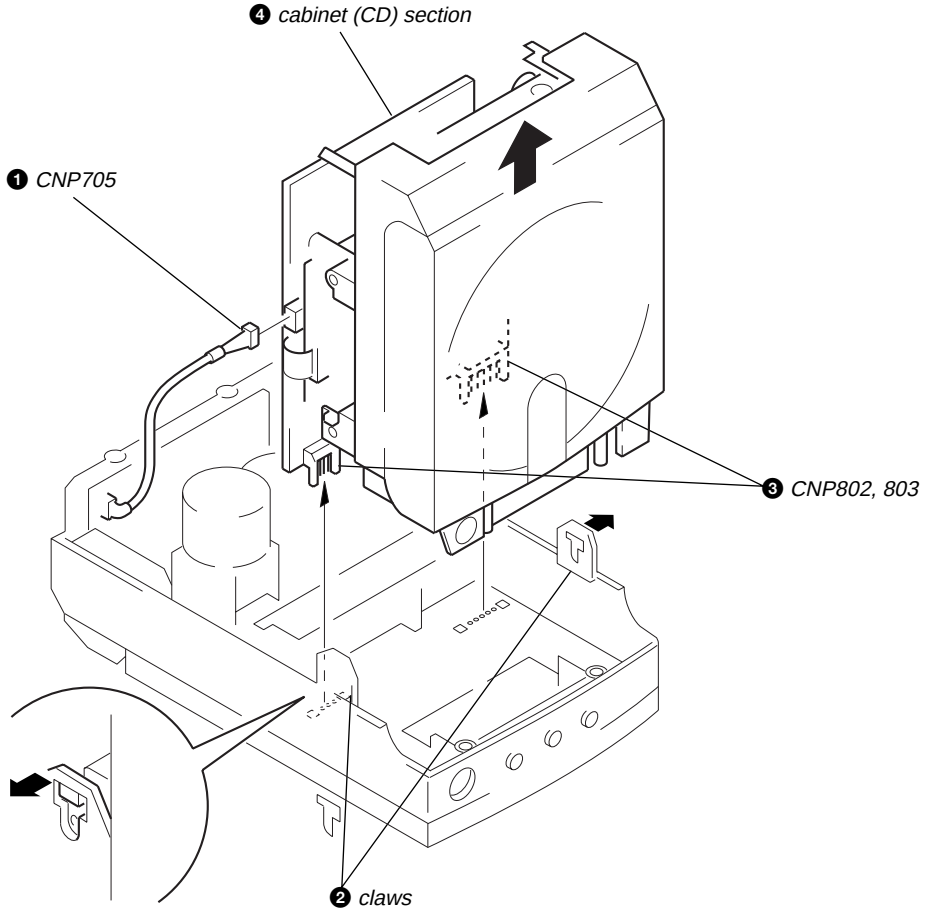
3-2. CASE (LOWER) SECTION



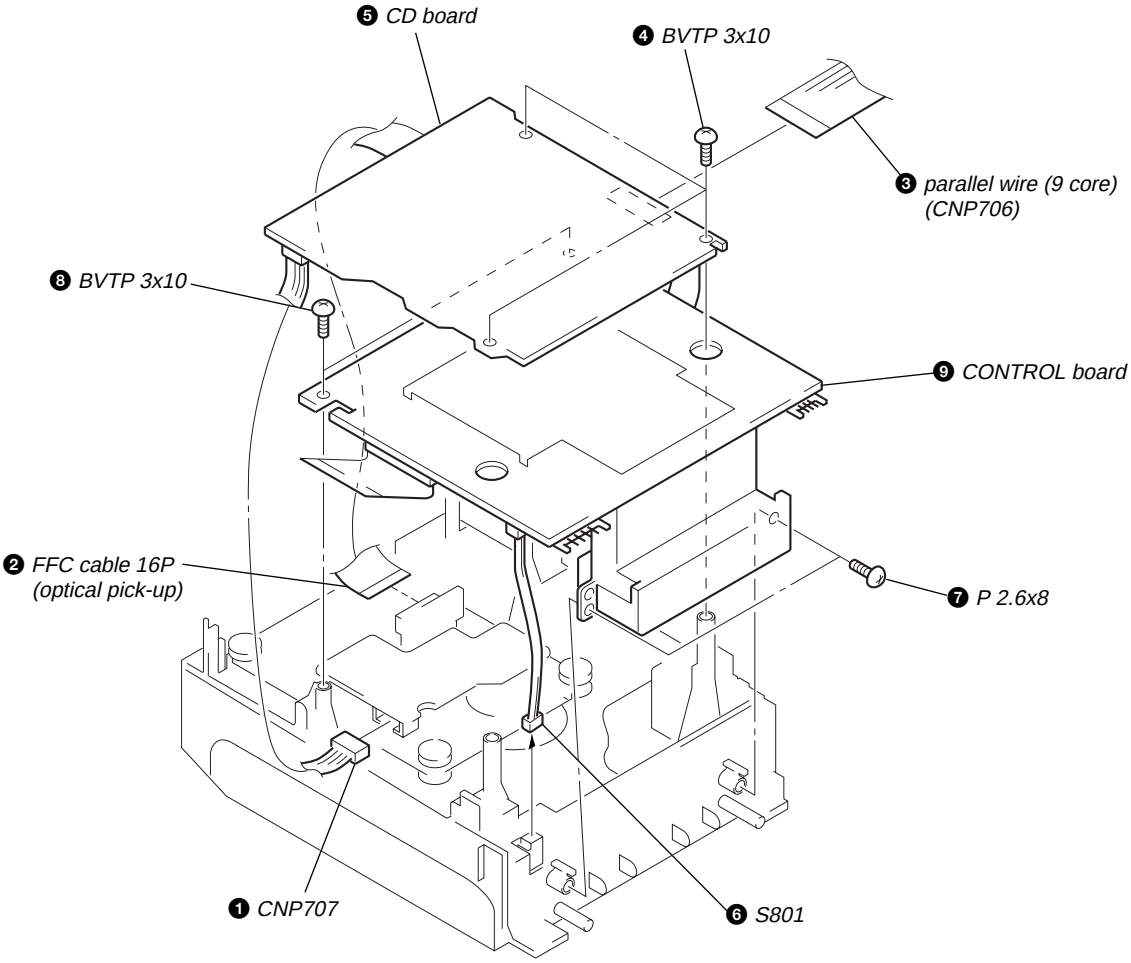
3-3. TAPE MECHANISM DECK SECTION



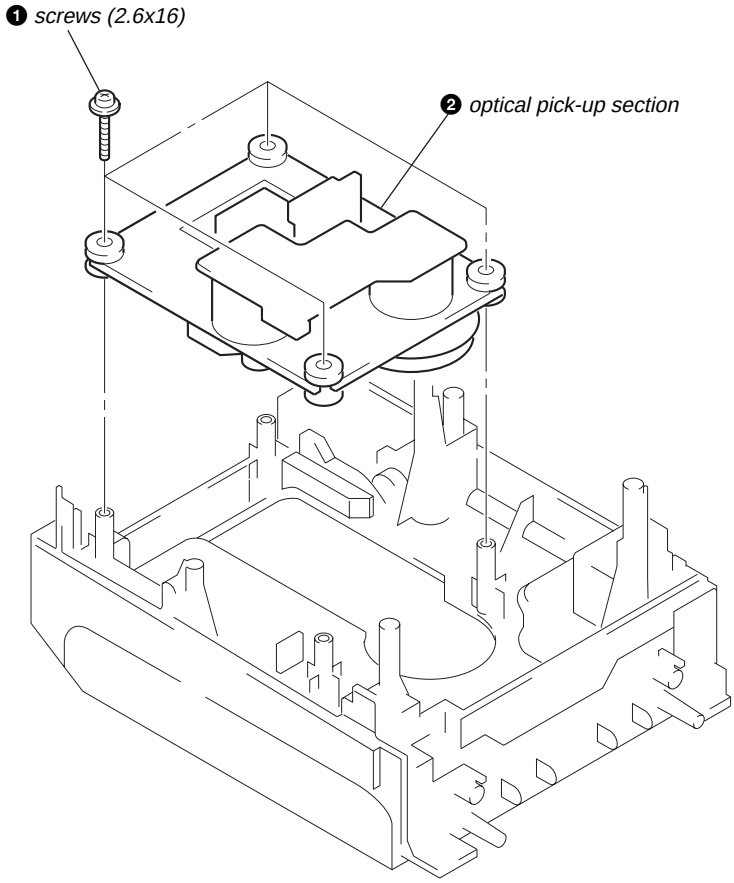
3-4. CABINET (CD) SECTION



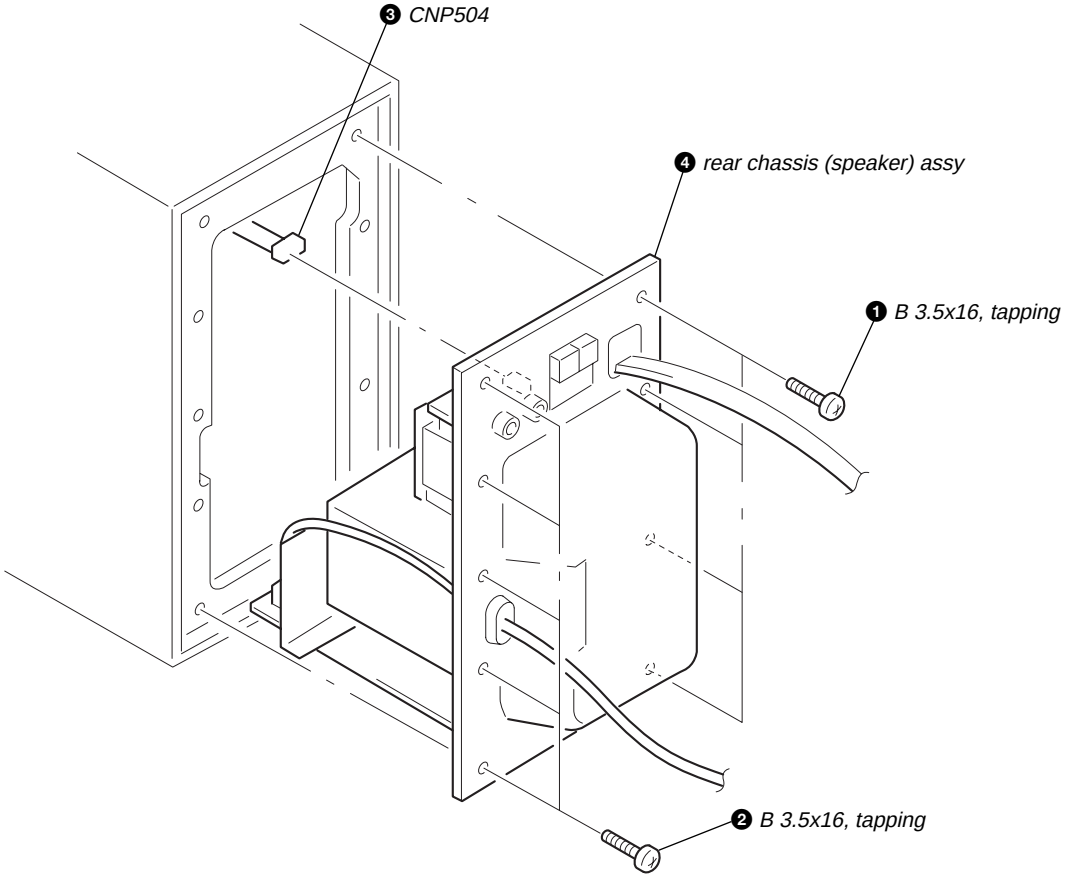
3-5. CD, CONTROL BOARD



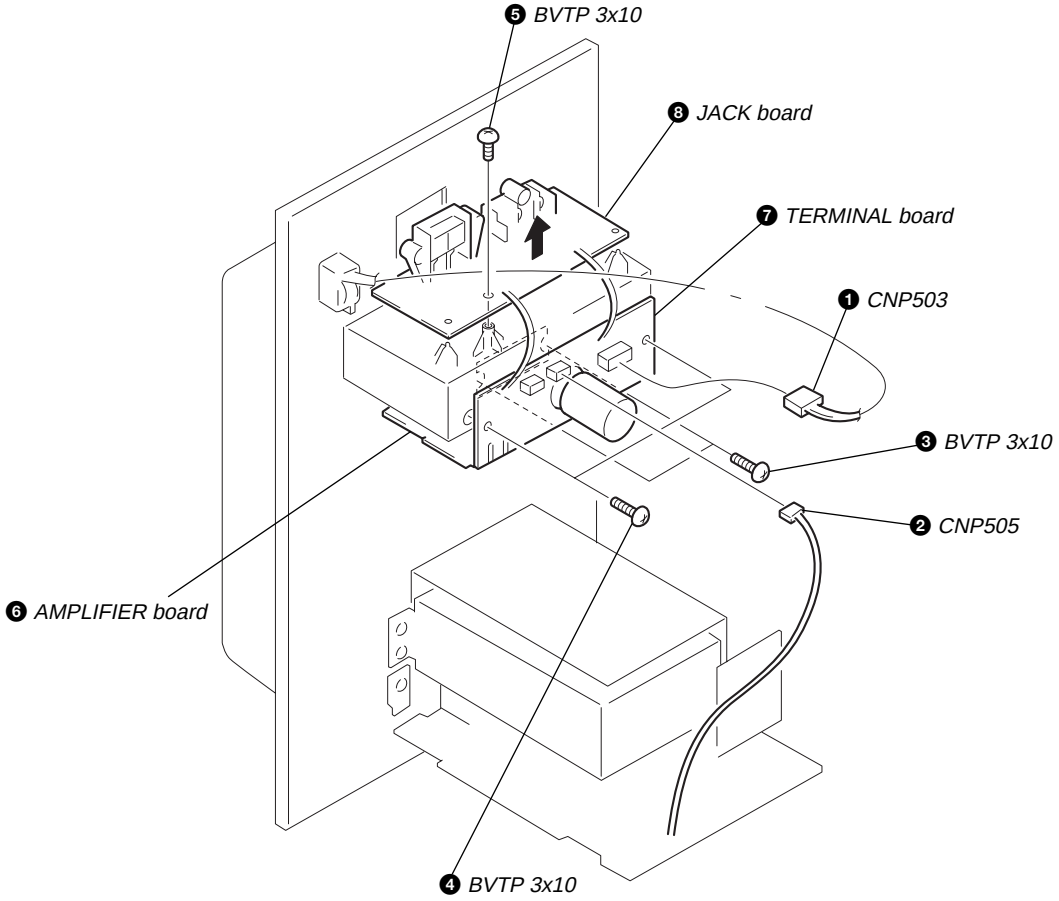
3-6. OPTICAL PICK-UP SECTION



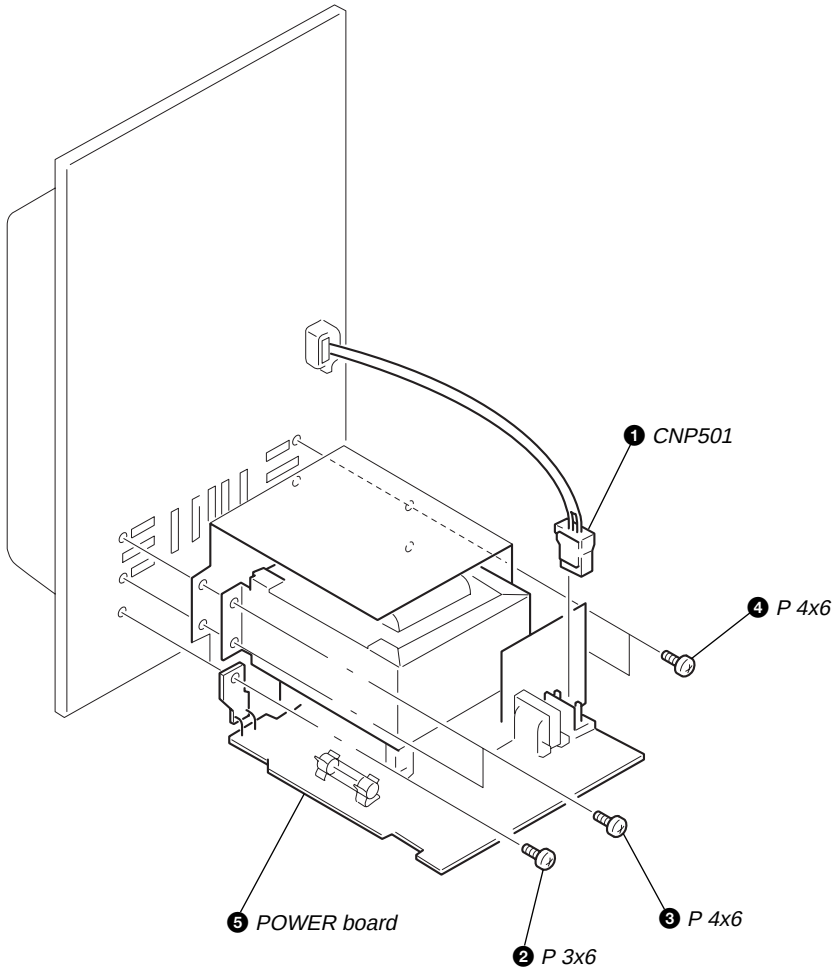
3-7. REAR CHASSIS (SPEAKER) SECTION



3-8. AMPLIFIER, TERMINAL, JACK BOARD



3-9. POWER BOARD



SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback/erase head, pinch roller, rubber belts, capstan, idlers
2. Demagnetize the record/playback/erase head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase portion.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	30 – 70 g•cm (0.42 – 1.02 oz•inch)
FWD Back tension		2.0 – 6.0 g•cm (0.028 – 0.076 oz•inch)
REV	CQ-102RC	30 – 70 g•cm (0.42 – 1.02 oz•inch)
REV Back tension		2.0 – 6.0 g•cm (0.028 – 0.076 oz•inch)
FF, REW	CQ-201B	80 – 170 g•cm (1.12 – 2.38 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 90 g (more than 3.17 oz)
REV	CQ-403R	

SECTION 5
ELECTRICAL ADJUSTMENTS

TAPE SECTION **0 dB = 0.775 V**

1. The adjustments should be performed in the order given in the service manual. (As a general rule. Playback circuit adjustment should be completed before performing recording circuit adjustment.)
2. The adjustments should be performed for both L-ch and R-ch unless otherwise indicated.

Standard Output Level

	SP OUT	PHONES
Load impedance	6 Ω	32 Ω
Output level	0.775 V (0 dB)	0.25 V (–10 dB)

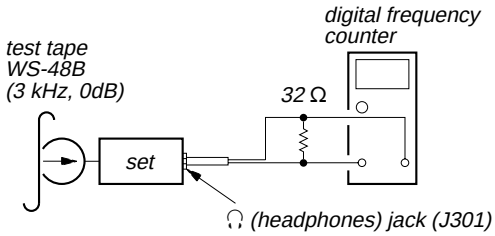
Test Tape

Type	Signal	Used for
WS-48B	3 kHz, 0 dB	Tape speed adjustment
P-4-A063	6.3 kHz, –10 dB	Head azimuth adjustment

Tape Speed Adjustment

Procedure:

Mode: playback



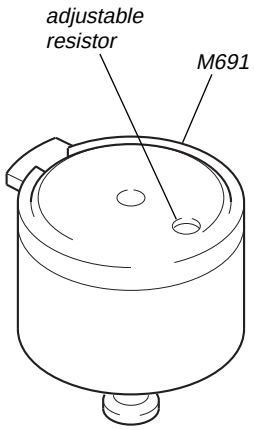
Adjust so that the value on the digital frequency counter is 3,000 Hz.

Specification Value:

Digital Frequency counter
2,970 to 3,030 Hz

Adjust so that the frequency at the beginning and that at the end of tape winding are between 2,970 to 3,030 Hz.

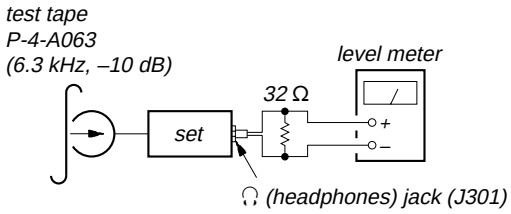
Adjustment Location:



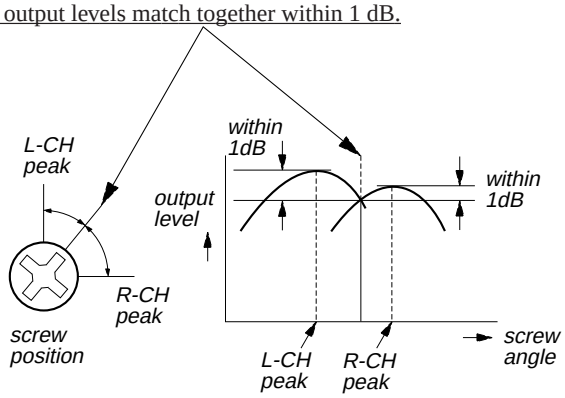
Record/Playback/Erase Head Azimuth Adjustment

Procedure:

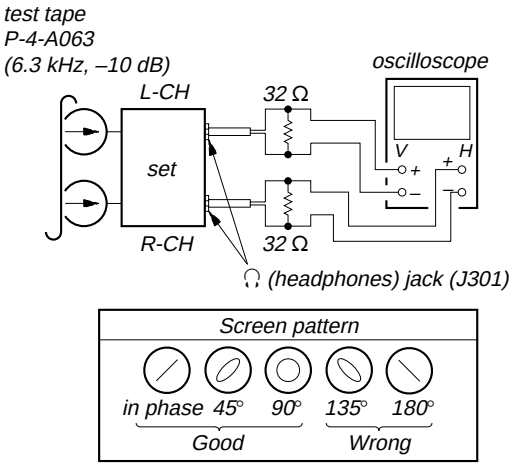
1. Mode: playback



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.

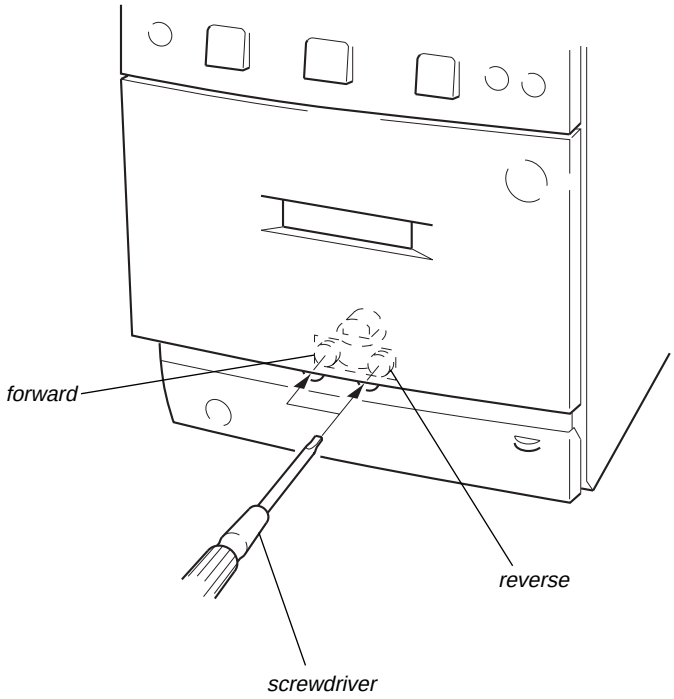


3. Phase Check
   Mode: playback



4. After the adjustment, lock the screws with locking compound.

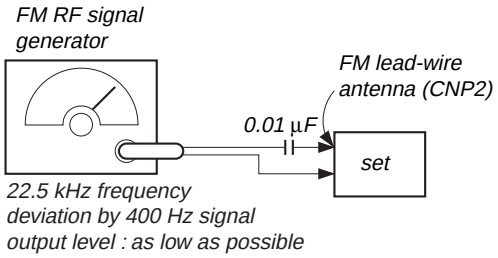
Adjustment Location:



TUNER SECTION | 0 dB = 1 µV

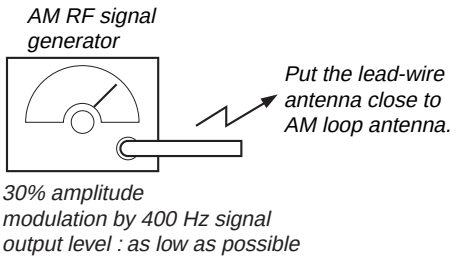
- **FM Section**

Setting:
FUNCTION button: FM

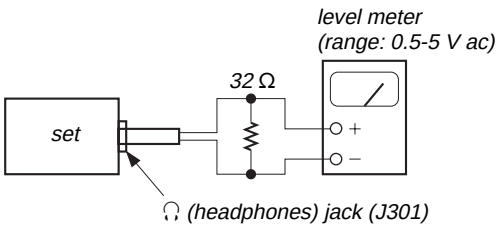

FM RF signal generator
FM lead-wire antenna (CNP2)
0.01 µF
set
22.5 kHz frequency deviation by 400 Hz signal output level : as low as possible

- **AM Section**

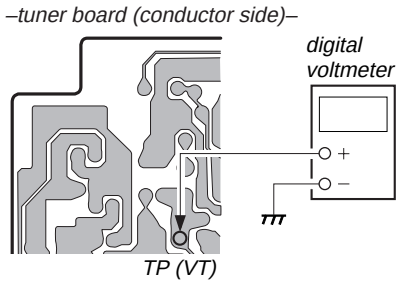
Setting:
FUNCTION button: AM


AM RF signal generator
Put the lead-wire antenna close to AM loop antenna.
30% amplitude modulation by 400 Hz signal output level : as low as possible

- **Connecting Level Meter (FM and AM)**



- **Connecting Digital Voltmeter (FM and AM)**



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	87.6 MHz	108 MHz
Reading on Digital voltmeter	1.6 ± 0.4V	6.5 ± 0.5V
Adjustment Part	L2	<confirmation>

Note: Not use the FM RF signal generator in this adjustment.

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L1	CT1
87.6 MHz	108 MHz

AM FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	530 kHz	1,710 kHz
Reading on Digital voltmeter	1.0 ± 0.5 V	5.0 ± 1.0 V
Adjustment Part	L4	<confirmation>

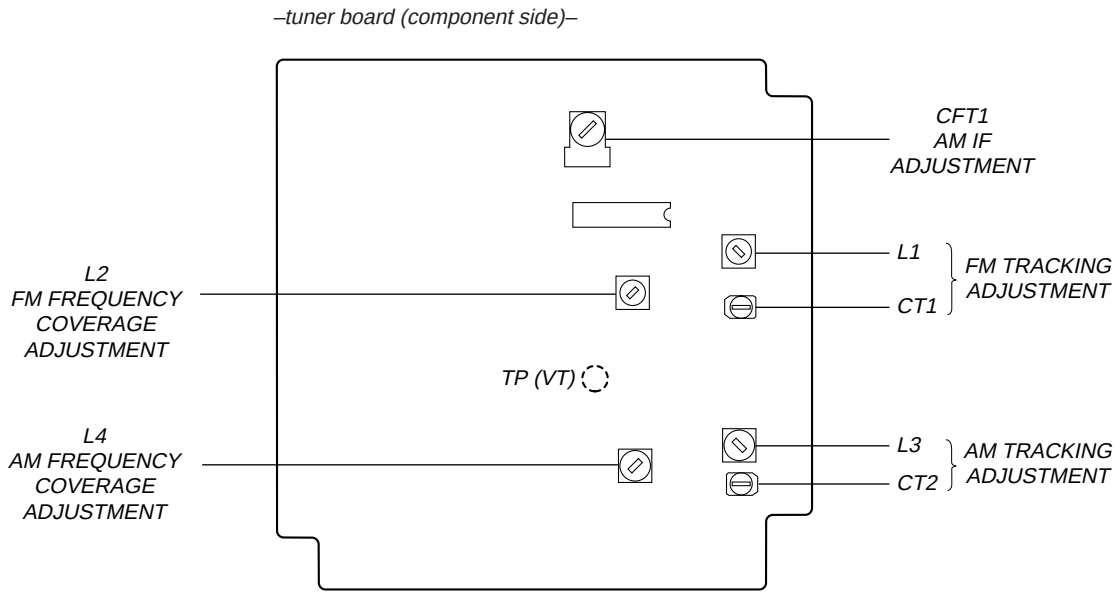
Note: Not use the AM RF signal generator in this confirm.

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	CT2
620 kHz	1,400 kHz

AM IF ADJUSTMENT
Adjust for a maximum reading on level meter.
CFT1
450 kHz

Adjustment Location: TUNER board (See page 13.)

Adjustment Location:



CD SECTION

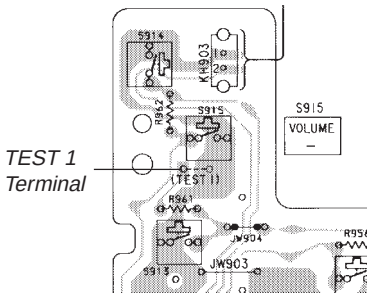
Notes on Adjustment

1. Perform adjustment in test mode.
   After adjustments, be sure to release test mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18. Part No. 3-702-101-01) only when so indicated.

How to Put the Set into Test Mode

1. Disconnect an AC plug cord. (Power is not applied to the set.)
2. Solder across the TEST1 terminal.
3. Close the lid (CD).
4. Connect an AC plug cord.

[SW (A) BOARD] (Conductor Side)



How to Release the Test Mode

1. Be sure to disconnect the AC plug cord and remove the solder bridge at the TEST1 terminal connected before in setting.
2. The set thus becomes available for normal operation

Before Beginning Adjustment

Put the set into test mode and perform the following checks. Repair if there are any problems.

• Sled Motor Check

Press the ▶▶I, I◀◀ buttons and confirm that the optical pick-up moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises.

▶▶I : Optical pick-up moves to the outer circumference
I◀◀ : Optical pick-up moves to the inner circumference

• Focus Search Check

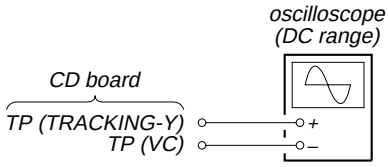
1. Press the ► button. (Focus search operation is performed continuously.)
2. Look at the optical pick-up objective lens and confirm that it moves up and down smoothly, when no catching or abnormal noises.
3. Press the ■ button.
   Confirm that focus search operation stops. If it does not , press the ■ button again longer.

Note: When the malfunction is occurred by mis-passing other keys, turn off the power and check again from making the test mode.

E-F Balance Adjustment

This adjustment is to be done when the optical pick-up is replaced.

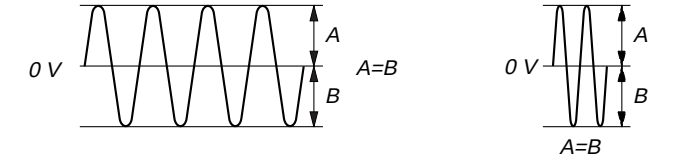
Procedure:



1. Connect the oscilloscope to TP (TRACKING-Y) and TP (VC) on the CD board.
2. Insert the disc (YEDS-18) in and close the lid (CD).
3. Put the set into test mode.
4. Press the ▶▶I and I◀◀ buttons to move the optical pick-up to the center.
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Adjust RV703 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.

Note: *Take long sweep time for easy monitoring.*

VOLT/DIV: 0.2 V (with the 10:1 probe in use.)
TIME/DIV: 1 ms



Adjustment value: 0.4 ± 0.2 Vp-p (A + B)

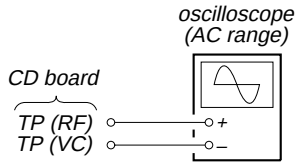
7. Release the test mode after adjustment is completed.

Adjustment Location: CD board (See page 17.)

Focus Bias Adjustment

This adjustment is to be done when the optical pick-up is replaced.

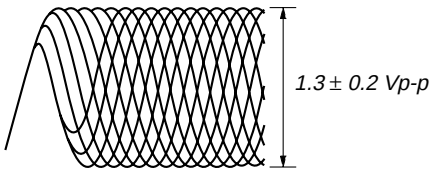
Procedure:



1. Connect the oscilloscope TP (RF) and TP (VC) on the CD board.
2. Insert the disc (YEDS-18) in and close the lid for CD.
3. Put the set into test mode. (See page 14.)
4. Press ▶▶| and |◀◀ buttons to move the optical pick-up to the center. (Move the optical pick-up to the music area on the disc to enable easy visibility of the eye pattern.)
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Press the ► button.
   [Both tracking and sled are turned ON.]
7. Adjust RV701 so that the oscilloscope waveform is as shown in the figure below. (eye pattern)
   A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

• RF signal reference waveform (eye pattern)

VOLT/DIV : 0.2 V (With the 10:1 probe in use)
TIME/DIV : 500 ns



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

8. Release the test mode after adjustment is completed.

Adjustment Location: CD board (See page 17.)

REFERENCE

Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.
However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.
Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.
However, as these reciprocate, the adjustment is at the point where both are satisfied.

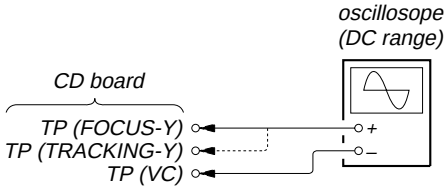
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Gain / Symptoms	Focus	Tracking
• The time until music starts becomes longer for ■→► on automatic selection. (|◀◀, ▶▶| buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for ■→► or automatic selection. (|◀◀, ▶▶| buttons pressed.)	—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	low
• More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

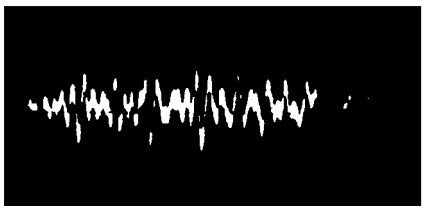
– Simple Adjustment –

Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the primary adjustment are only a little different, return the controls to the original position.



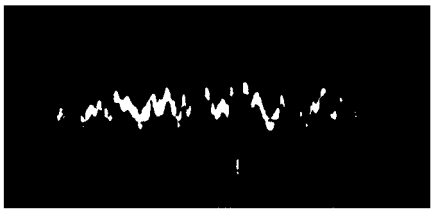
Procedure:

1. Keep the set horizontal.
   If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.
2. Connect the oscilloscope TP (FOCUS-Y) and TP (VC) on the CD board.
3. Insert the disc (YEDS-18) in and close the lid for CD.
4. Put the set into test mode. (See page 14.)
5. Press the ► button.
   [From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Press the ► button.
   [Both tracking and sled are turned ON.]
7. Adjust RV702 so that the waveform is as shown in the figure below. (Focus gain adjustment)

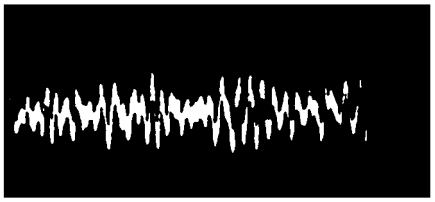


• Inconnect Examples (DC level changes more than on adjusted waveform)

low focus gain



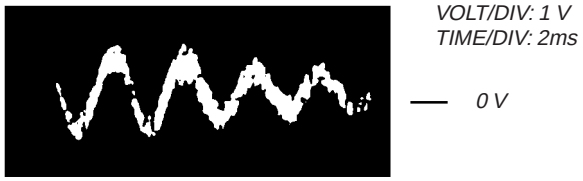
high focus gain



8. Connect the oscilloscope to TP (TRACKING-Y) and TP (VC) on the CD board.
9. Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)

• Incorrect Examples (fundamental wave appears)

low tracking gain



high tracking gain
(high fundamental wave than for low gain)

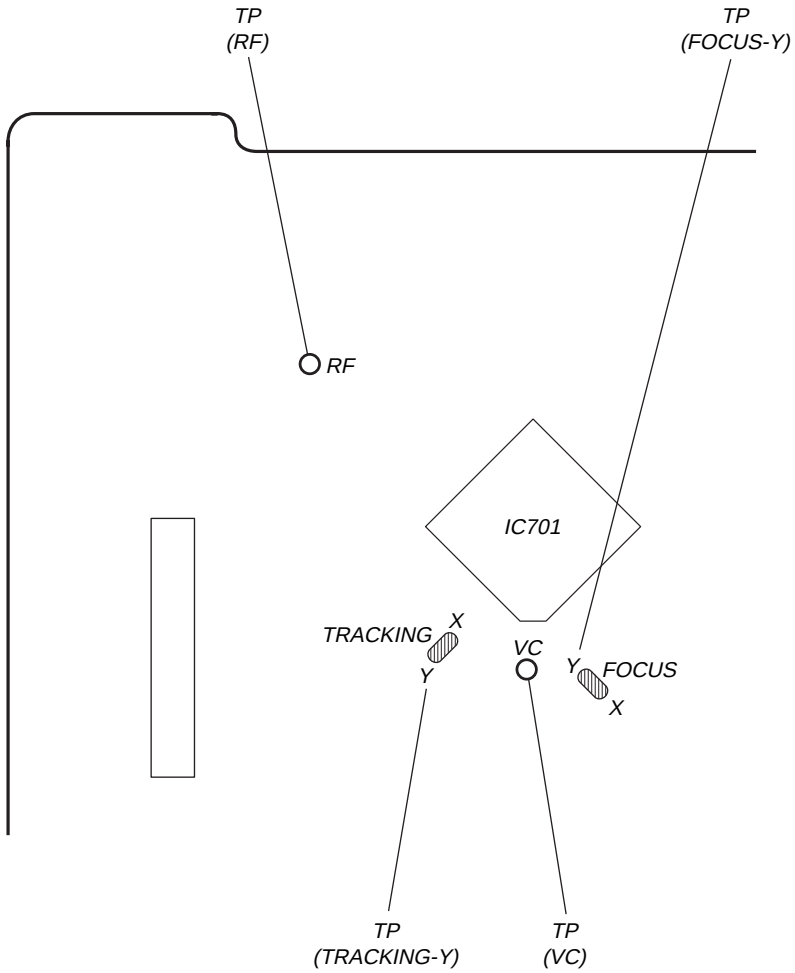
Note:
VOLT/DIV: with the 10:1 probe in used.

10. Release test mode after adjustment is completed.

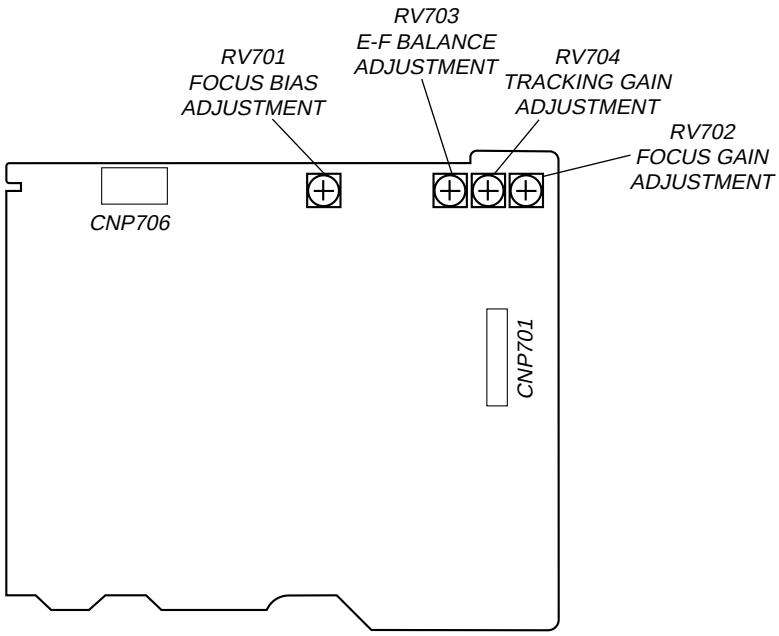
Adjustment Location: CD board (See page 17.)

Connection and Adjustment Location:

–CD board (conductor side)–



–CD board (component side)–



SECTION 6
DIAGRAMS

6-1. IC PIN DESCRIPTION

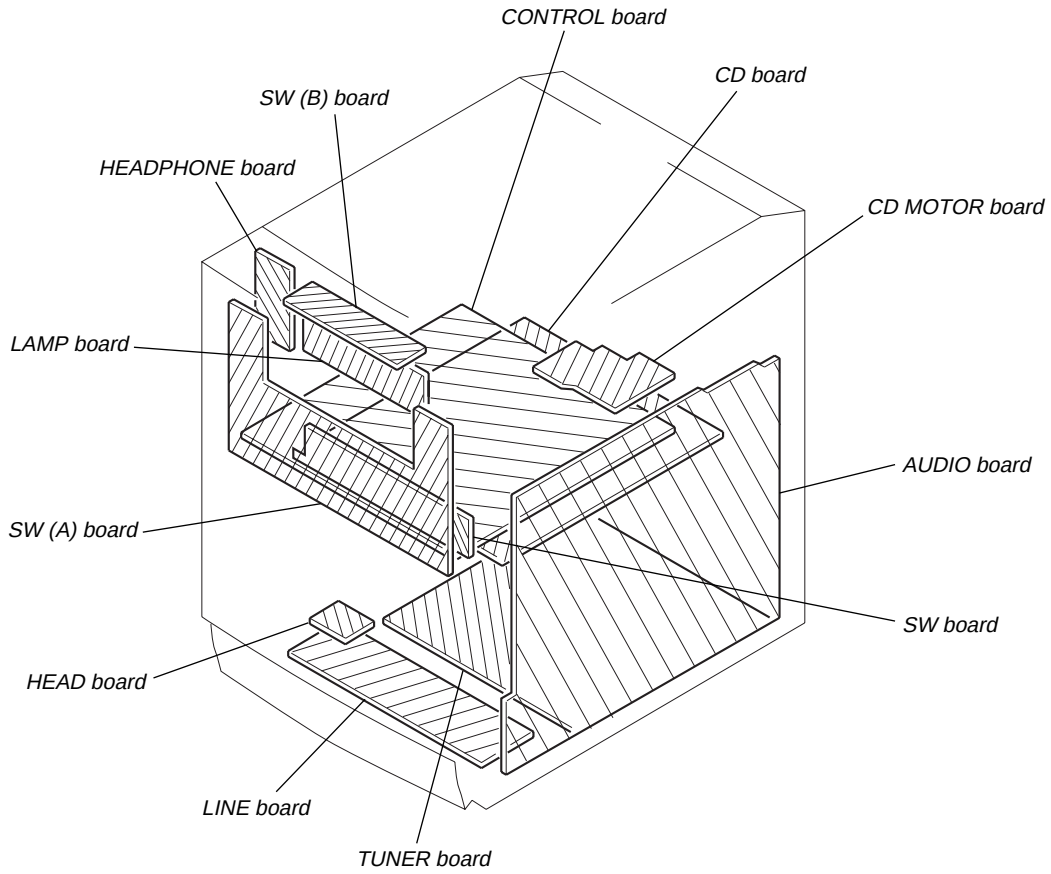
• IC801 CXP83120A-036Q (SYSTEM CONTROL, LCD DRIVE)

Pin No.	Pin Name	I/O	Pin Description
1	AC CHK	I	AC check input
2	C-SCOR	I	CD-SCOR input
3	RMC	I	Remote commander input
4	C-XRST	O	CD system reset output
5	C-XLAT	O	CD DSP (IC702) command latch output
6	C-DAT	O	CD DSP (IC702) command data output
7	C-CLK	O	Clock output for CD DSP (IC702) command.
8	C-DOOR	I	Open/close detection input (“L”: close, “H”: open)
9	328/332	I	328/332 select input (Fixed at “H”.)
10	C-SENC	I	CD-SENS input
11	C-SQCK	O	Clock output for CD SUBQ.
12	C-SQSO	I	CD SUBQ input
13	T-BIAS	I	Tape REC BIAS input
14	—	—	Not used. (Open)
15	T-REC	I	Tape REC input
16	T-SOL	O	Plunger control output
17	T-MODE	O	HEAD switching output
18	T-AMS	I	AMS sensitivity switching input
19	T-MCON	O	Motor control output (“H”: Motor ON)
20	P-CON	O	Power on/off control output
21	V-CLK	O	Volume clock output
22	V-DAT	O	Volume data output
23	V-CE	O	Electrical volume (IC302) chip enable output
24	R-ST	I	Stereo detection input
25	R-COUNT	I	Tuner PLL IC count input
26	R-DAT	O	Tuner PLL IC data output
27	R-CLK	O	Tuner PLL IC clock output
28	R-CE	O	Tuner PLL IC chip enable output
29	9K/10K	I	9K/10K select input (Not used.)
30	T-STAT	I	Tape detection input
31 – 34	KEY-0 – 3	I	Key return signal input
35	INIT	O	Initial setting output (Fixed at “H”.)
36	SIMUKE	I	Destination setting input
37	SFC	O	Shift clock ON/OFF output
38	RST	I	Reset input
39	EXTAL1	I	Clock oscillation input (4.19 MHz)
40	XTAL1	O	Clock oscillation output (4.19 MHz)
41	VSS	—	Ground (for A/D converter)
42	XTAL2	O	Clock oscillation output (Open)
43	EXTAL2	I	Clock oscillation input (Fixed at “L”.)
44	AVREF	I	Reference voltage input (for A/D converter)
45	AVSS	—	Ground (for A/D converter)
46	VL	O	LCD bias resistor current control terminal (Cut off at standby)
47 – 49	VLC3 – 1	—	LCD bias power supply pin
50 – 53	COM0 – 3	O	LCD common signal output
54 – 77	SEG0 – 23	O	LCD segment signal output
78 – 84	NC	—	Not used. (Open)
85 – 87	—	—	Not used. (Open)
88	BL-CONT	O	LCD back light control output
89	VDD	—	Power supply pin (+5 V)

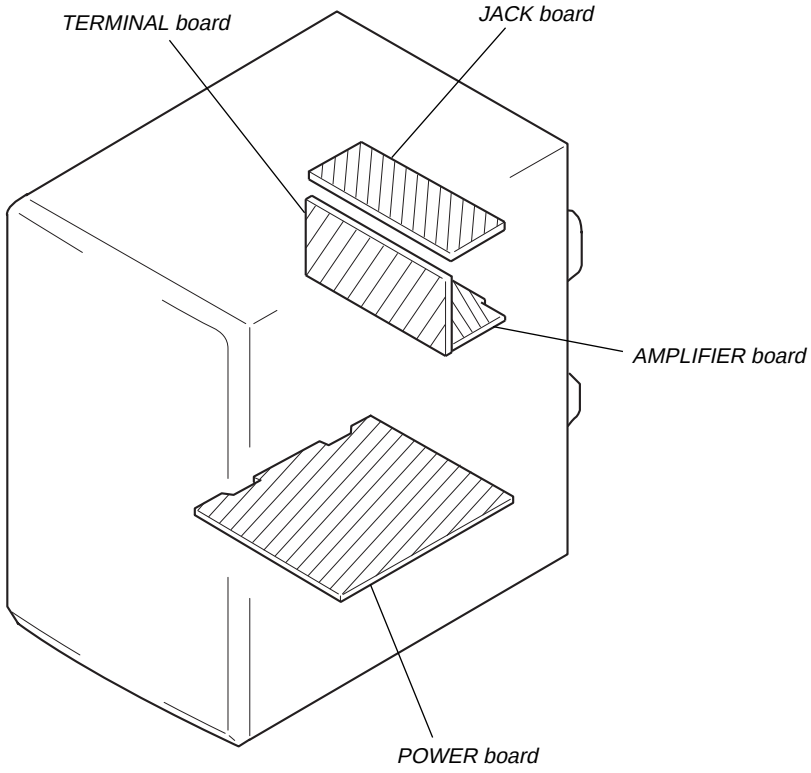
Pin No.	Pin Name	I/O	Pin Description
90	NC	—	Connected to the power supply.
91	VSS	—	Ground
92	TX	O	Crystal connection for clock oscillation. (32.768 kHz)
93	TEX	I	Crystal connection for clock oscillation. (32.768 kHz)
94	C-MUTE	O	Mute output for CD.
95	B-MUTE	O	Mute output for Tuner.
96	A-MUTE	O	Mute output for Audio.
97	ISS1	I	ISS1 switch input
98	ISS2	I	ISS2 switch input
99	T-END	I	Tape end detection input
100	NC	—	Not used. (Open)

6-2. CIRCUIT BOARDS LOCATION

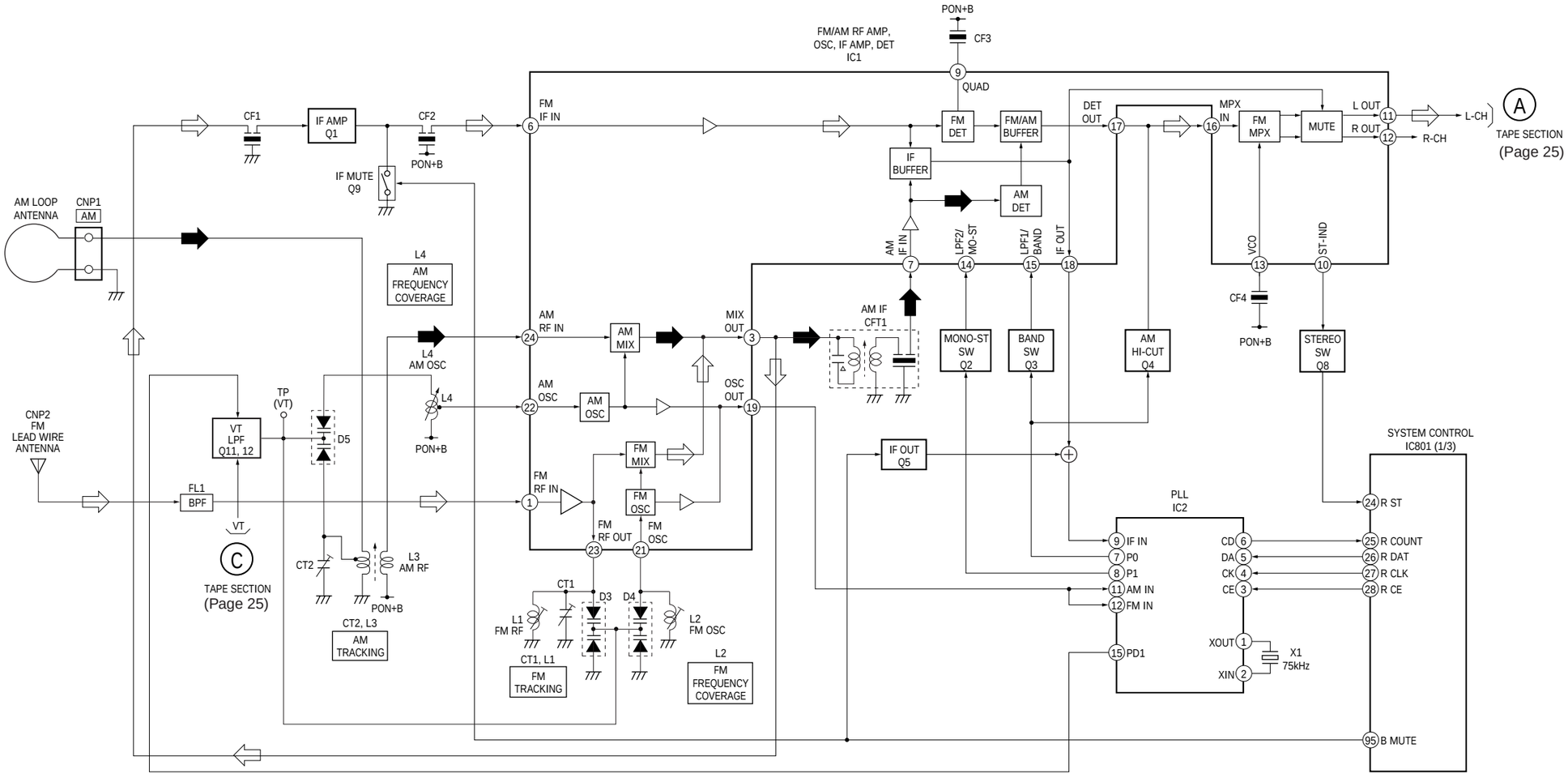
– Main Section –



– Speaker (L) Section –



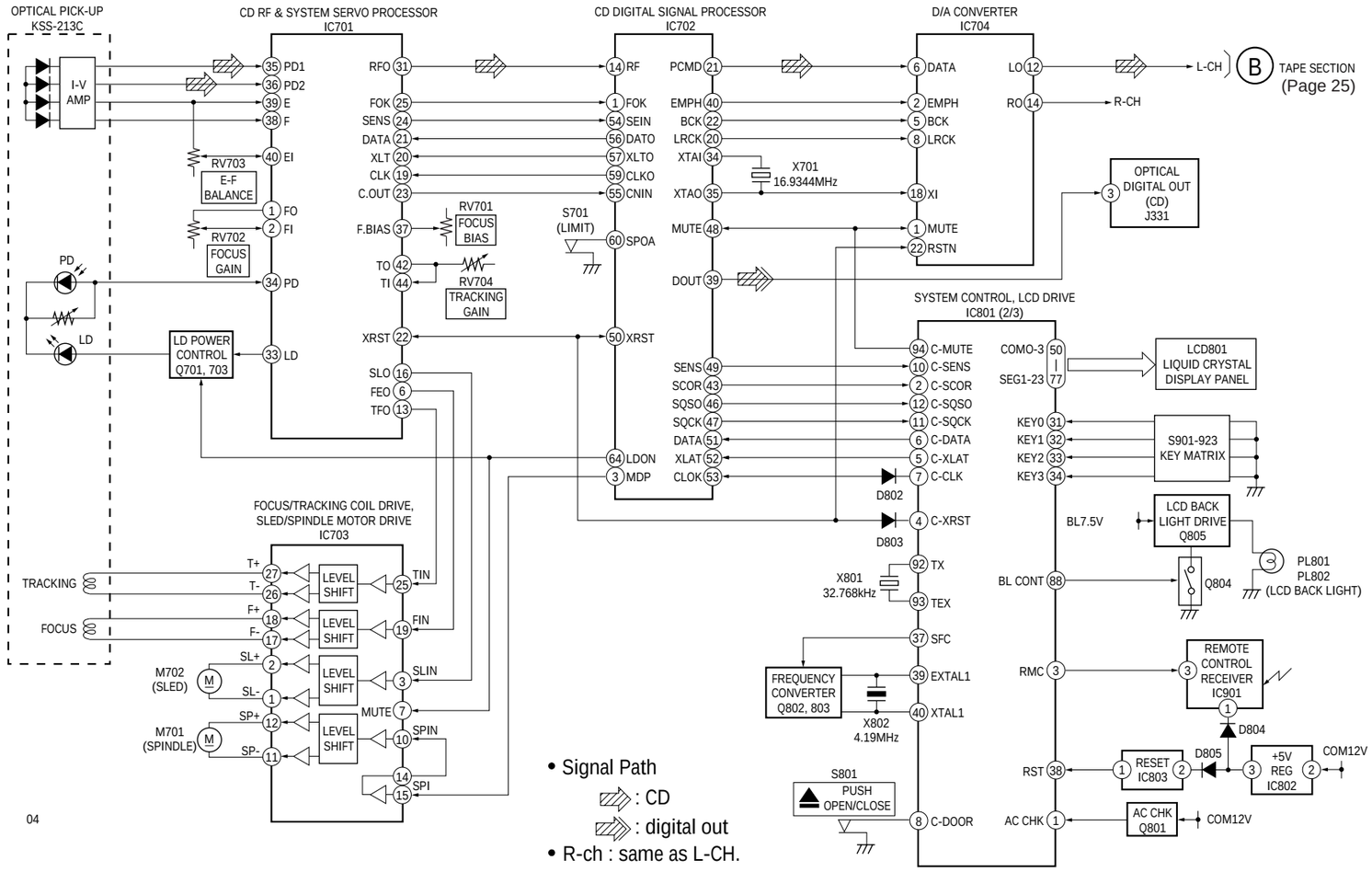
6-3. BLOCK DIAGRAM — TUNER SECTION —



- Signal Path
  - ⇨ : FM
  - ➡ : AM
- R-ch : same as L-CH.

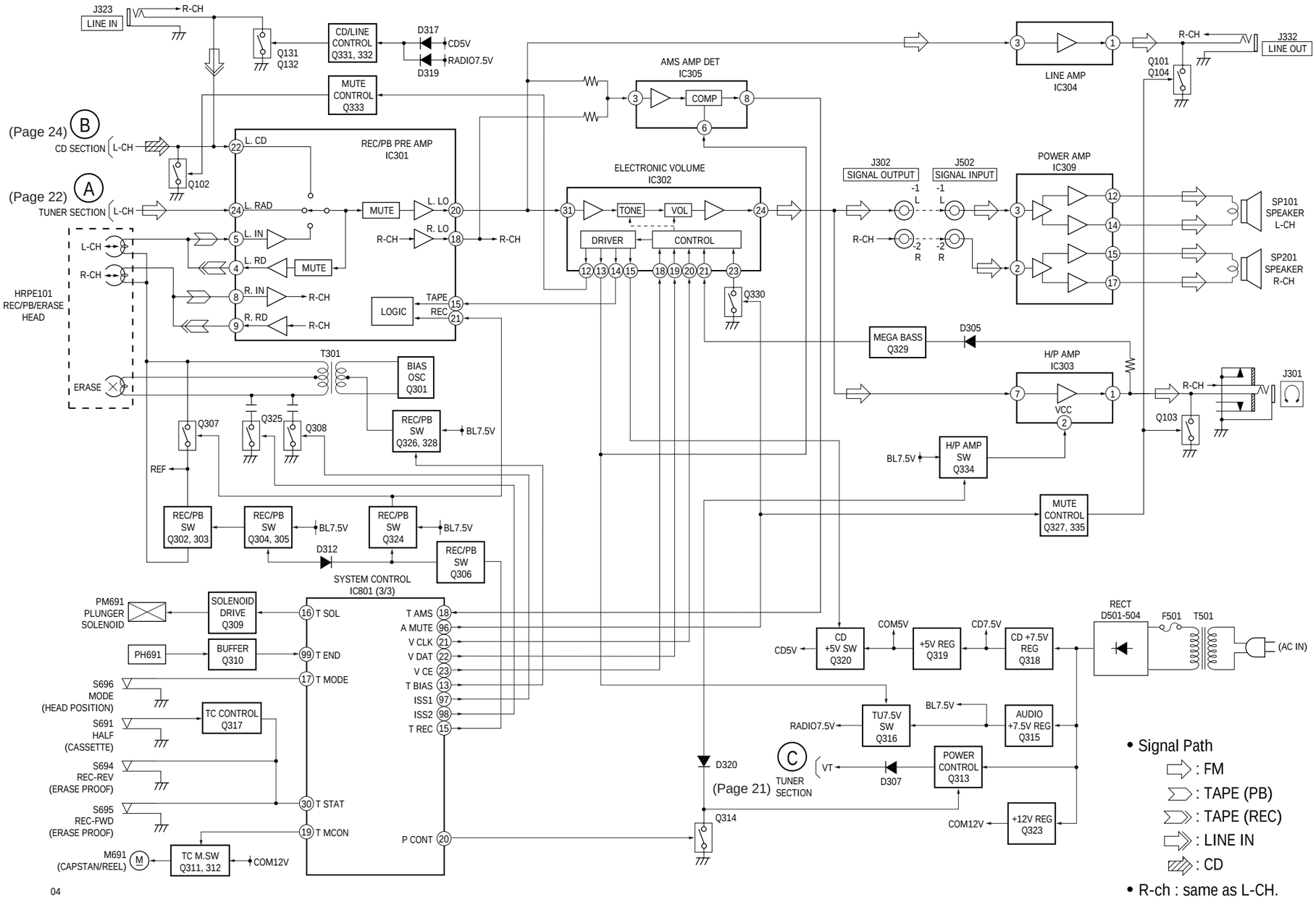
04

6-4. BLOCK DIAGRAM — CD SECTION —



- Signal Path
  - : CD
  - : digital out
- R-ch : same as L-CH.

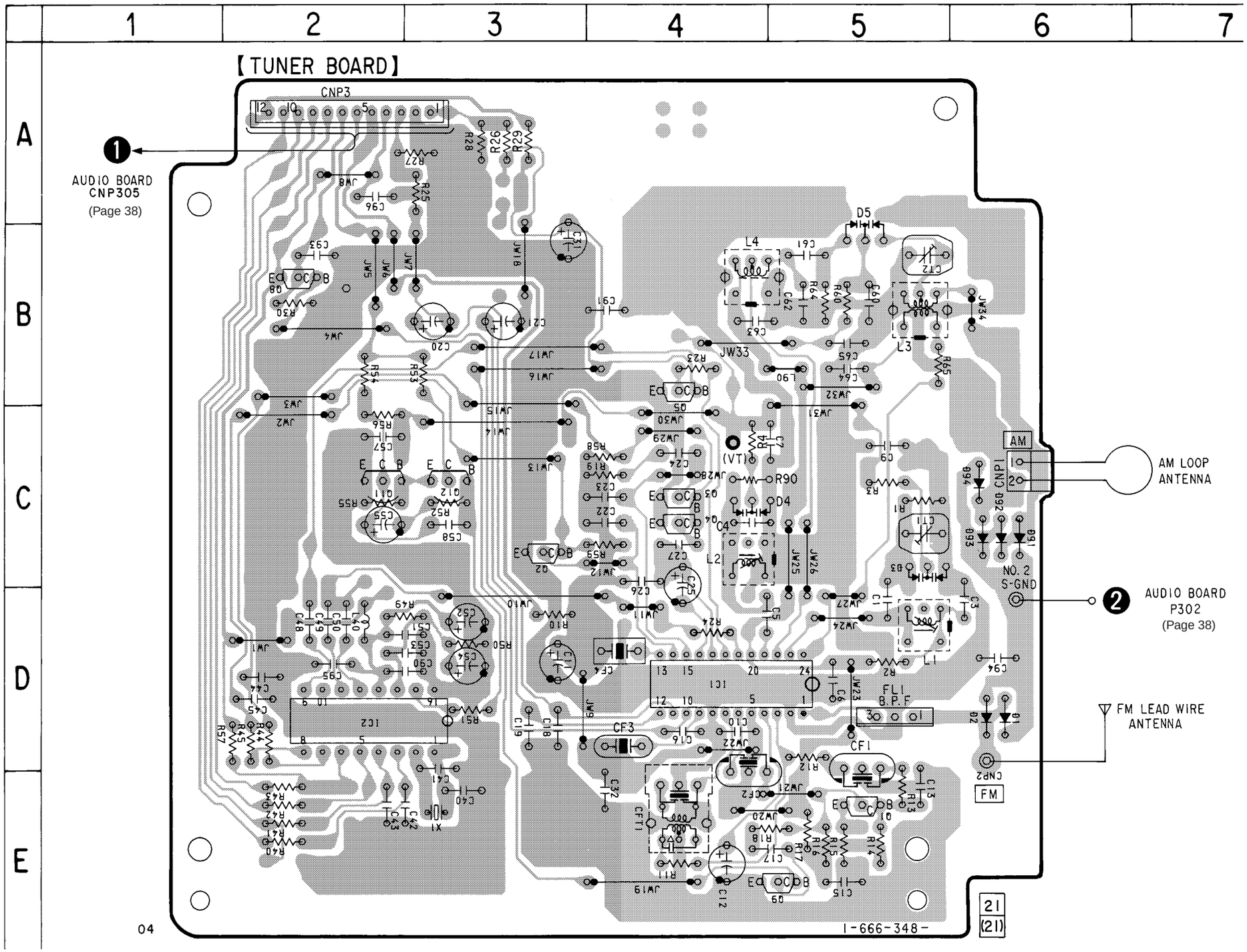
6-5. BLOCK DIAGRAM — TAPE SECTION —



6-6. PRINTED WIRING BOARD — TUNER SECTION — • Refer to page 20 for Circuit Boards Location.

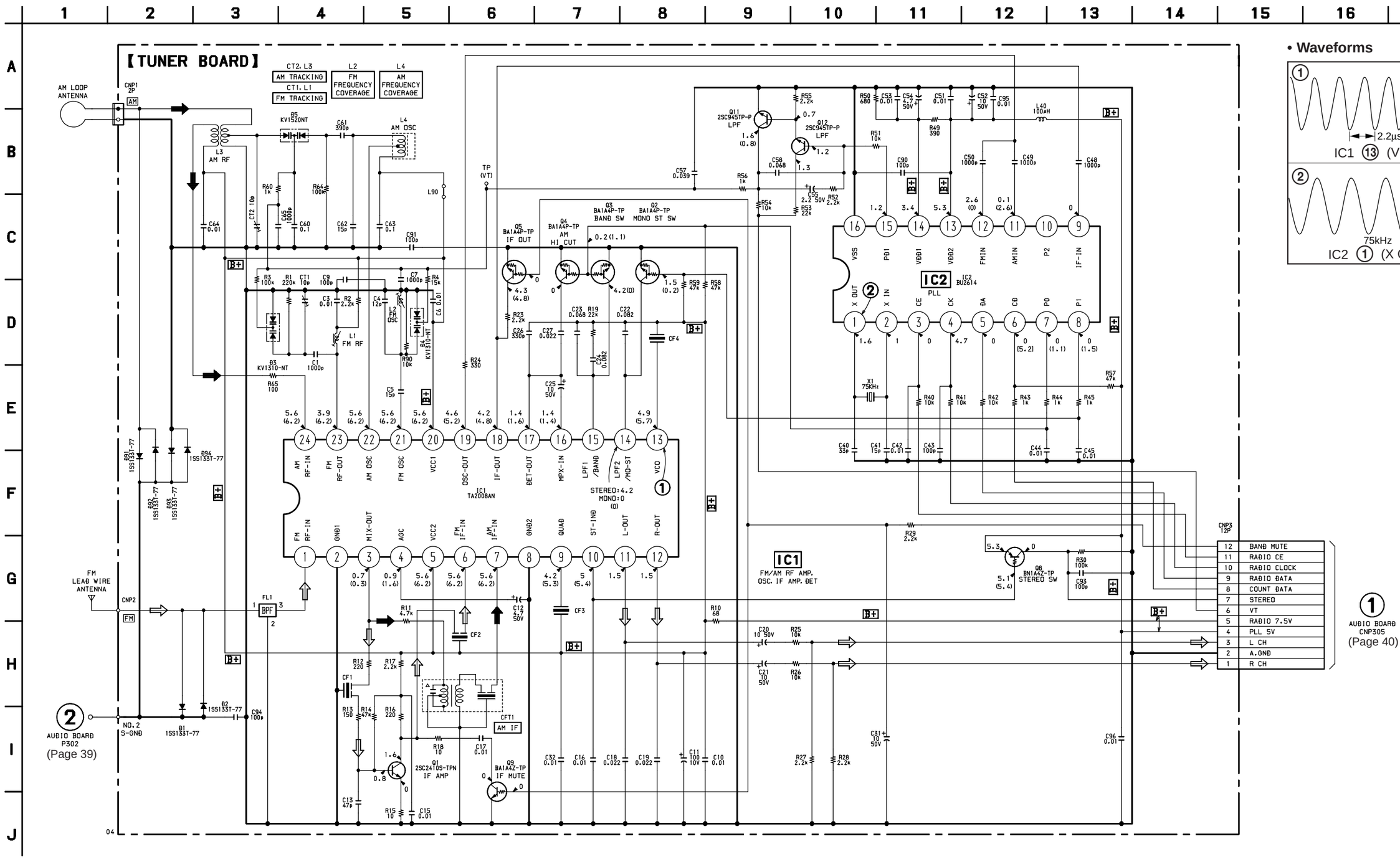
• **Semiconductor Location**

Ref. No.	Location
D1	D-6
D2	D-6
D3	C-5
D4	C-4
D5	B-5
D91	C-6
D92	C-6
D93	C-6
D94	C-6
IC1	D-4
IC2	D-2
Q1	E-5
Q2	C-3
Q3	C-4
Q4	C-4
Q5	B-4
Q8	B-2
Q9	E-4
Q11	C-2
Q12	C-3

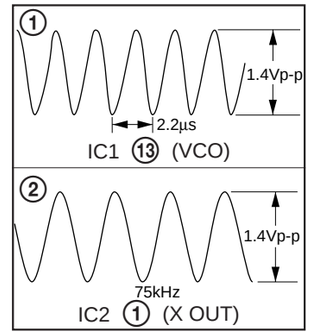


Note:
- ○——— : parts extracted from the component side.
- ⬚← : indicates side identified with part number.
- △ : internal component.
- ▒▒ : Pattern from the side which enables seeing.

6-7. SCHEMATIC DIAGRAM — TUNER SECTION — • Refer to page 51 for IC Block Diagrams.



• Waveforms



Note:

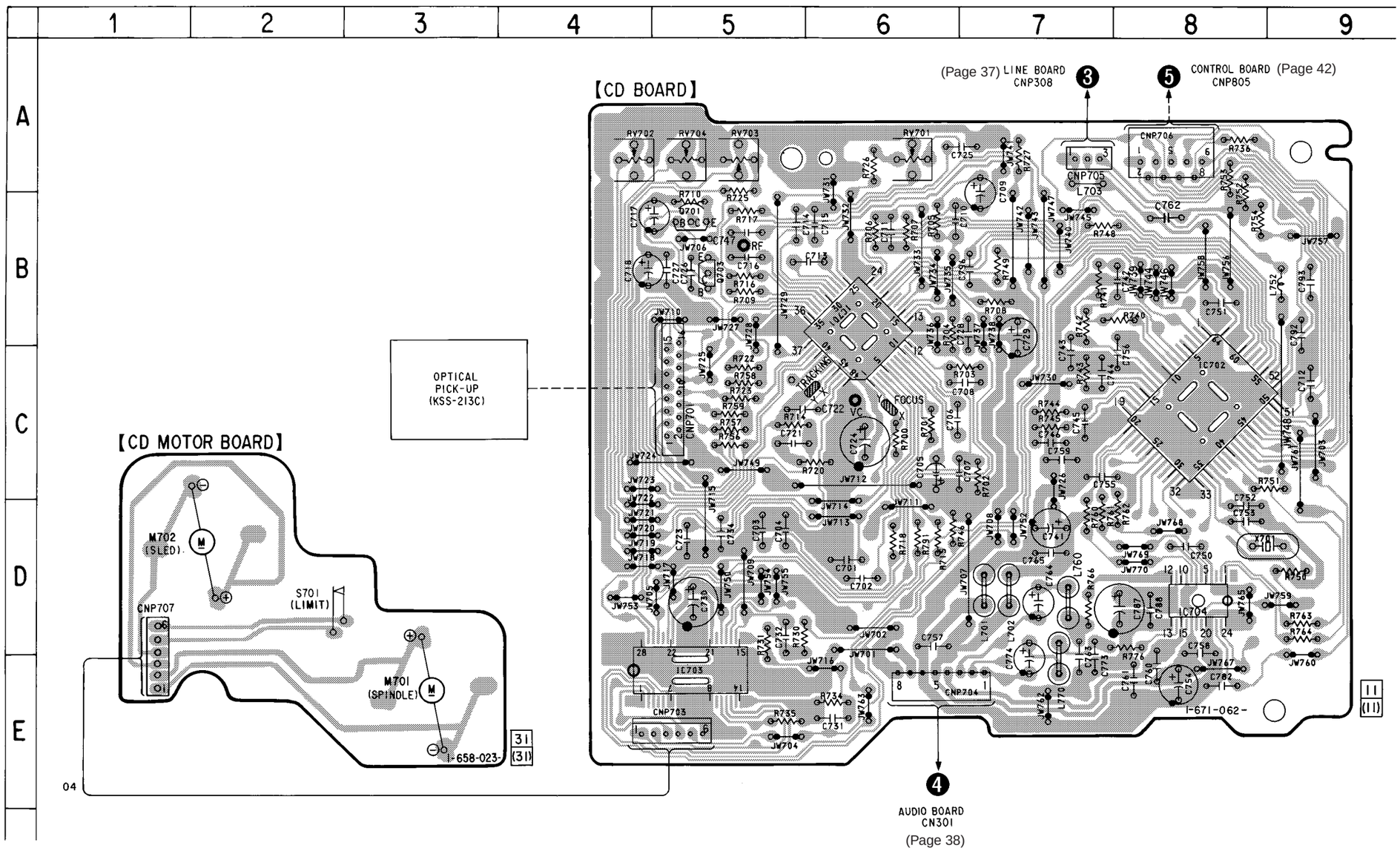
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- ▬ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : AM

6-8. PRINTED WIRING BOARDS — CD SECTION — • Refer to page 20 for Circuit Boards Location.

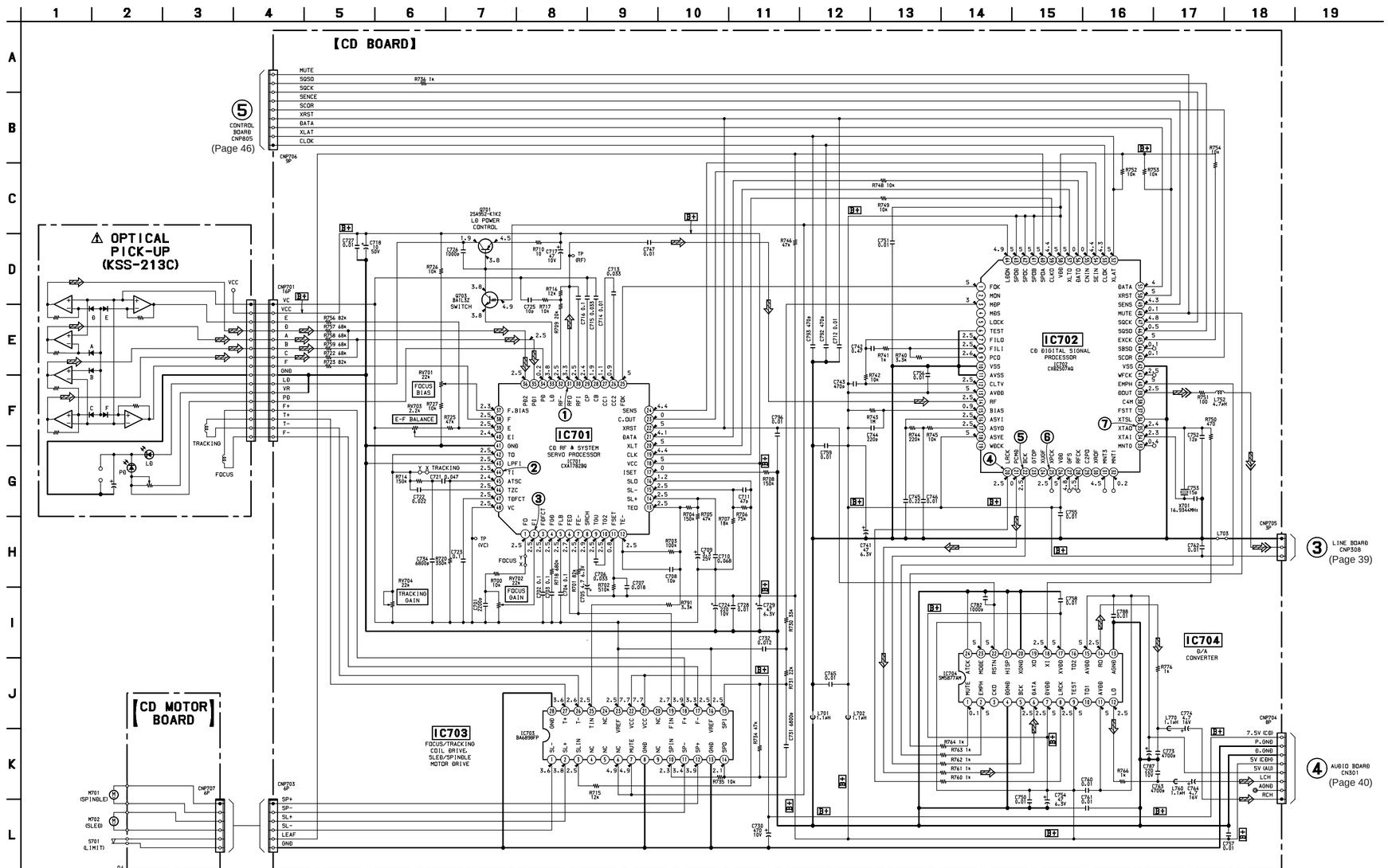
• **Semiconductor Location**

Ref. No.	Location
IC701	B-6
IC702	C-8
IC703	E-5
IC704	D-8
Q701	B-5
Q703	B-5

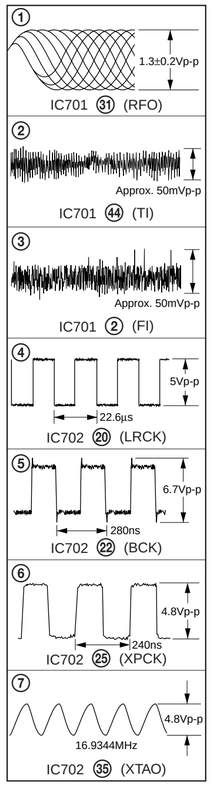
Note:
- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.



6-9. SCHEMATIC DIAGRAM — CD SECTION — • Refer to page 52 for IC Block Diagrams.



• **Waveforms (Mode:Play)**



Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

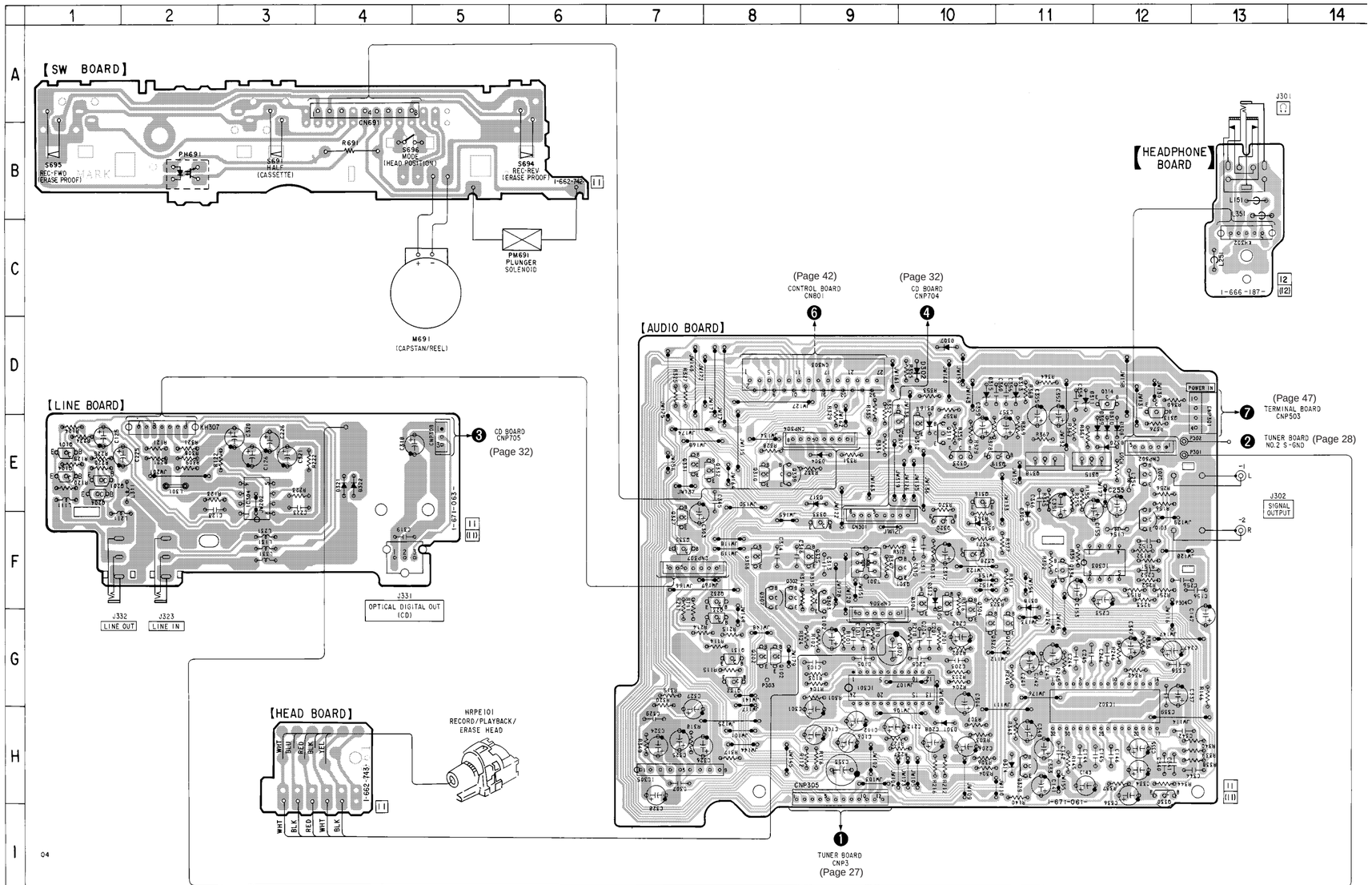
- B+ : B+ Line.
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark : CD STOP
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD
  ⇛ : digital out

6-10. PRINTED WIRING BOARDS — MAIN SECTION — • Refer to page 20 for Circuit Boards Location.

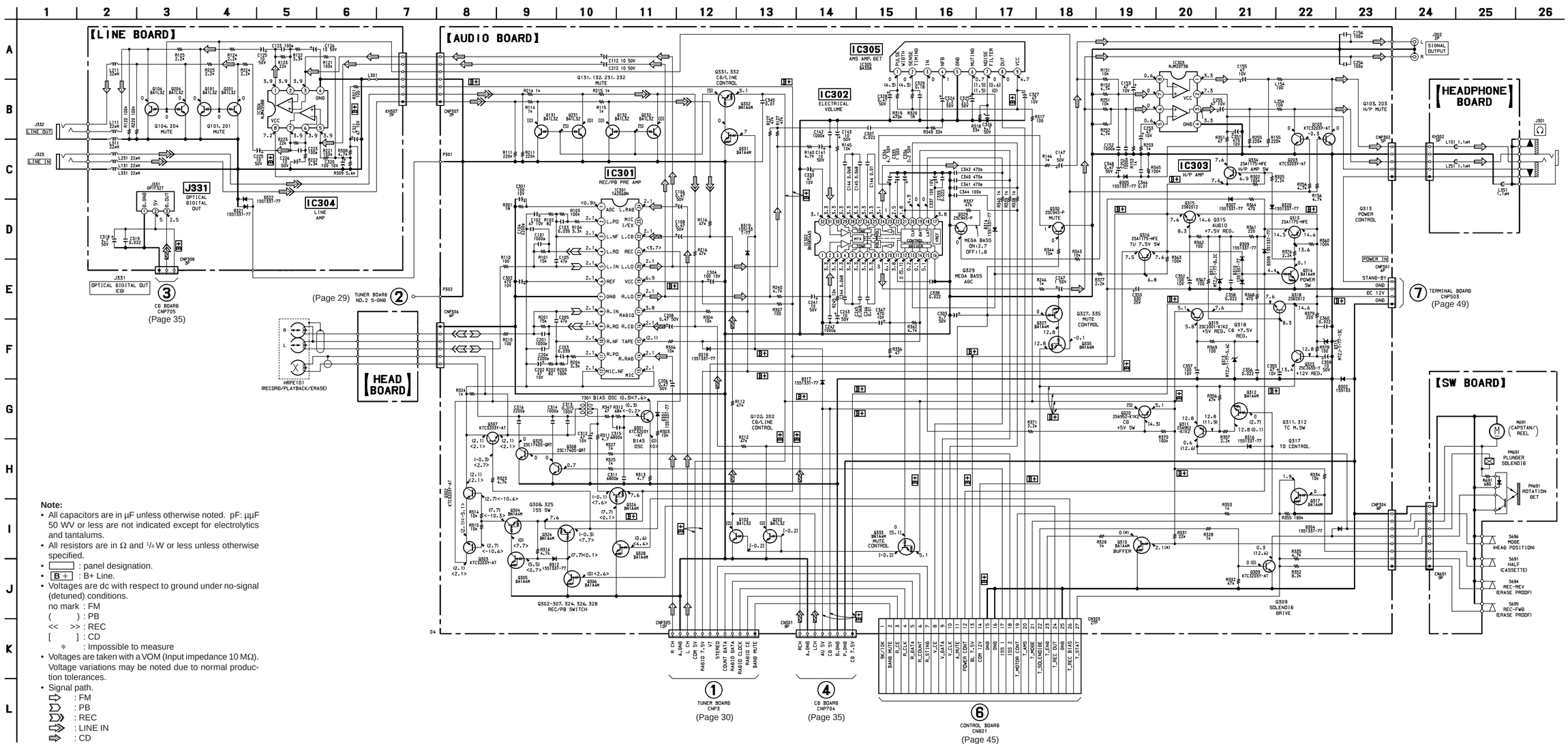
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D301	H-10	Q202	G-8
D302	D-10	Q203	E-12
D304	E-9	Q204	E-1
D305	F-11	Q231	G-8
D307	D-10	Q232	F-8
D308	E-12	Q301	F-9
D309	E-11	Q302	F-8
D310	E-12	Q303	F-9
D311	D-11	Q304	F-10
D312	F-10	Q305	F-10
D313	D-11	Q306	F-10
D314	H-11	Q307	F-8
D315	D-10	Q308	F-8
D316	E-10	Q309	E-8
D317	E-9	Q310	E-8
D318	F-11	Q311	E-10
D319	F-10	Q312	E-10
D320	E-12	Q313	D-12
D321	E-4	Q314	D-12
D322	E-4	Q315	E-11
		Q316	E-10
IC301	G-9	Q317	E-9
IC302	G-12	Q318	E-11
IC303	F-12	Q319	E-10
IC304	E-3	Q320	F-10
IC305	H-7	Q323	E-10
		Q324	G-11
J331	F-4	Q325	F-9
		Q326	G-10
PH691	B-2	Q327	F-7
		Q328	F-10
Q101	E-1	Q329	H-11
Q102	G-8	Q330	H-12
Q103	F-12	Q331	E-7
Q104	E-1	Q332	E-8
Q131	G-8	Q333	F-9
Q132	G-8	Q334	F-11
Q201	E-1	Q335	F-7

Note:
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- ▒▒ : Pattern from the side which enables seeing.



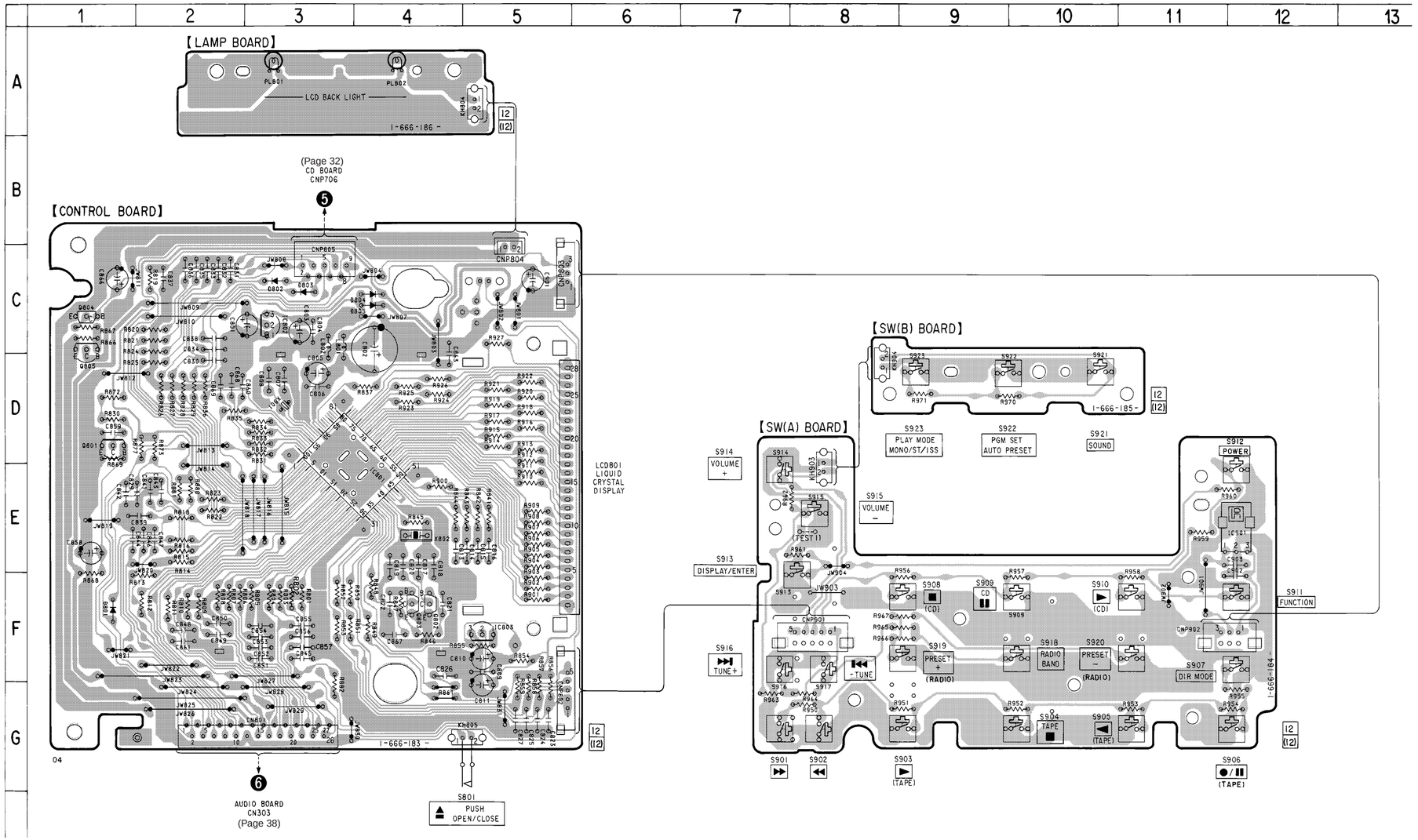
6-11. SCHEMATIC DIAGRAM — MAIN SECTION — • Refer to page 54 for IC Block Diagrams.



Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : PB
  << >> : REC
  [ ] : CD
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇨ : PB
  ⇨ : REC
  ⇨ : LINE IN
  ⇨ : CD
  ⇨ : digital out

6-12. PRINTED WIRING BOARDS — CONTROL SECTION — • Refer to page 20 for Circuit Boards Location.

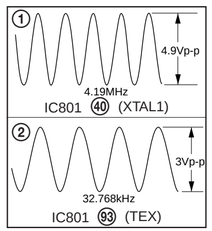


• Semiconductor Location

Ref. No.	Location
D801	F-1
D802	C-3
D803	C-3
D804	C-4
D805	C-4
IC801	E-4
IC802	C-3
IC803	F-5
IC901	E-12
Q801	D-1
Q802	F-4
Q803	F-4
Q804	C-1
Q805	D-1

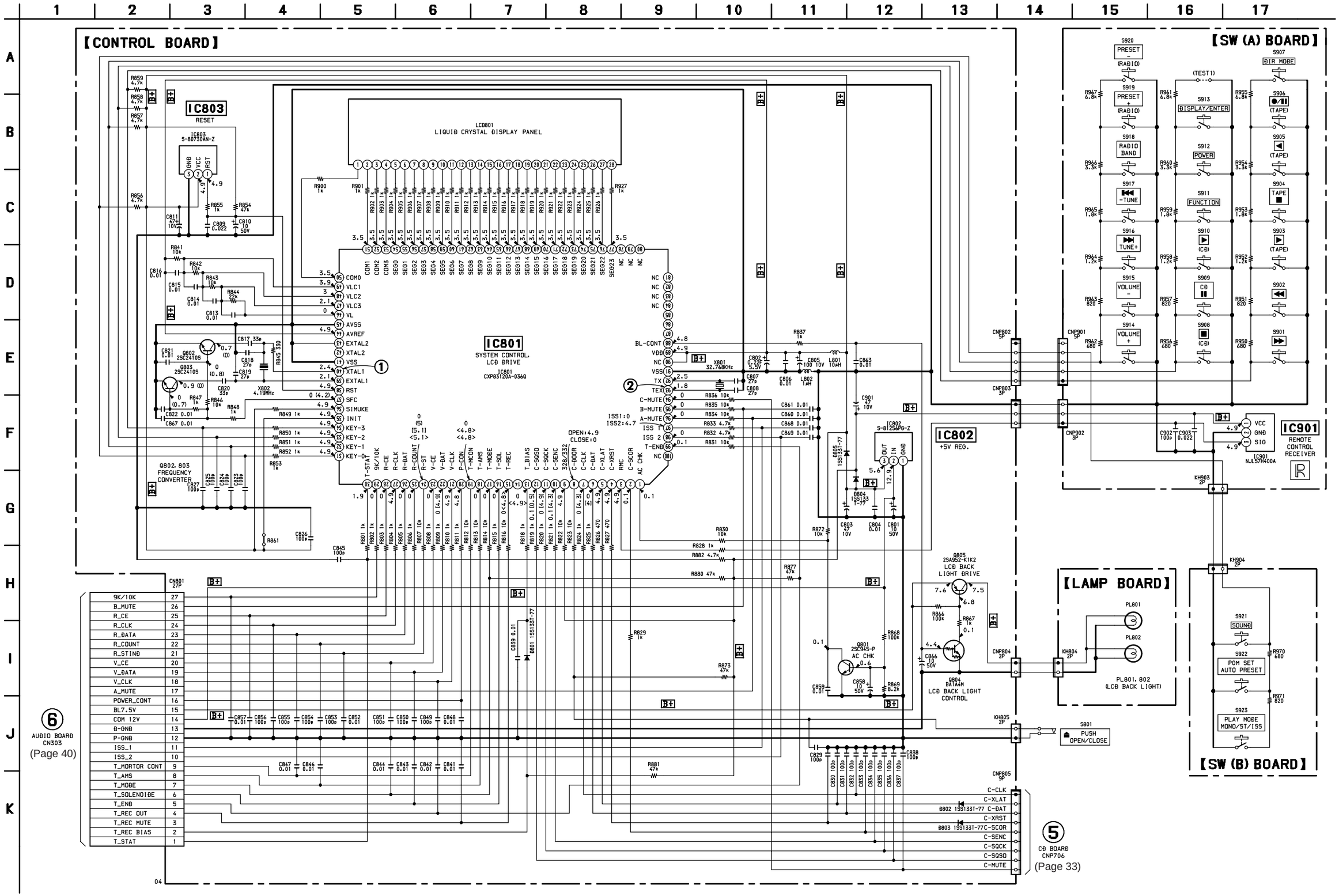
Note on Printed Wiring Boards:
- ⟜—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

• Waveforms



Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : PB
  << >> : REC
  [ ] : CD
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

6-13. SCHEMATIC DIAGRAM — CONTROL SECTION —

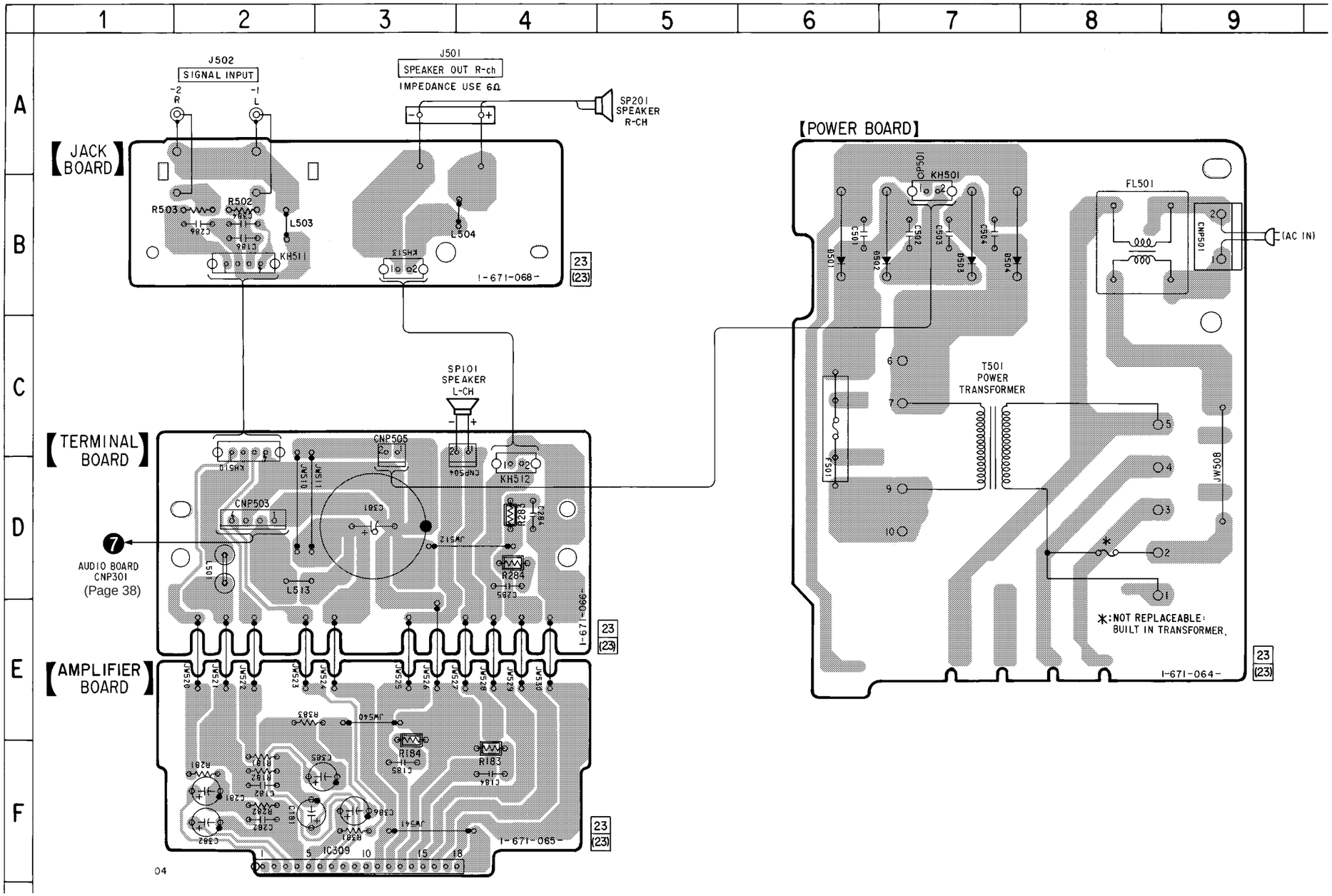


6-14. PRINTED WIRING BOARDS — POWER AMPLIFIER SECTION — • Refer to page 20 for Circuit Boards Location.

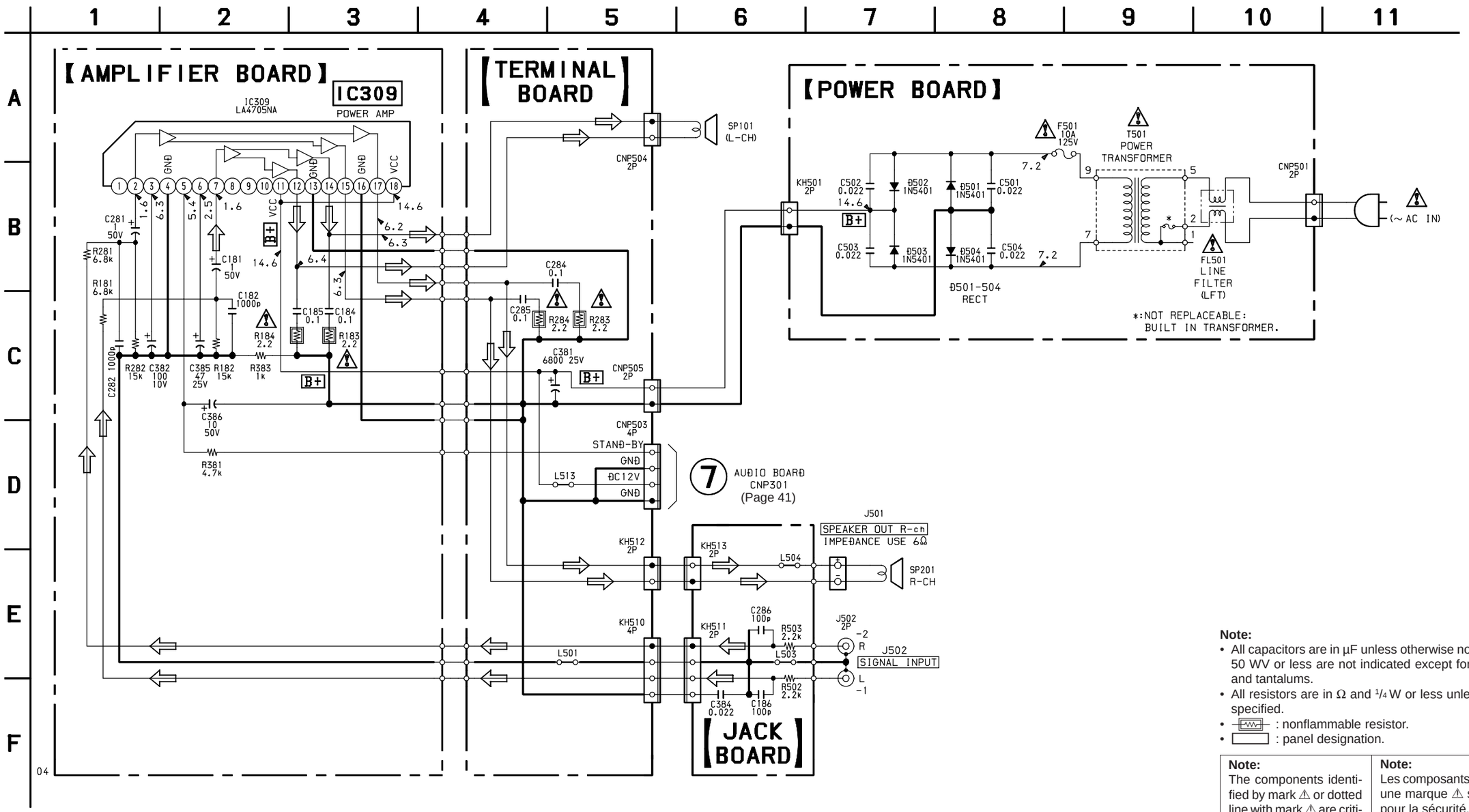
• **Semiconductor Location**

Ref. No.	Location
D501	B-6
D502	B-7
D503	B-7
D504	B-7
IC309	F-3

Note:
- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.



6-15. SCHEMATIC DIAGRAM — POWER AMPLIFIER SECTION —



Note:

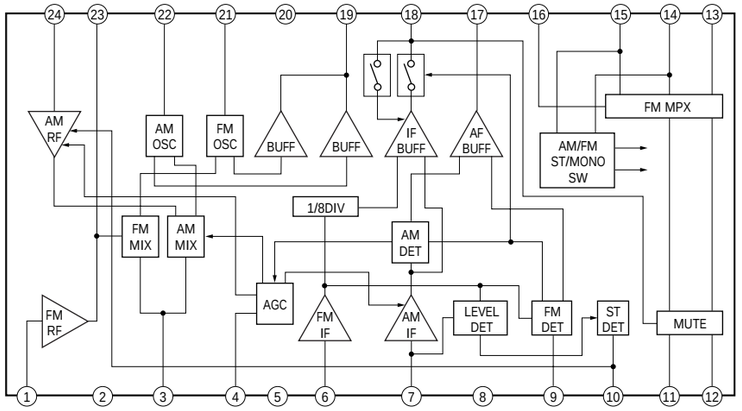
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- : nonflammable resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

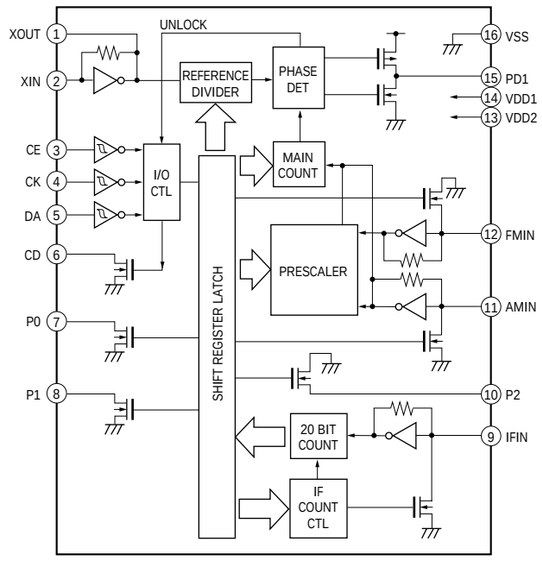
- B+ : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions. no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. ⇨ : FM

• IC Block Diagrams

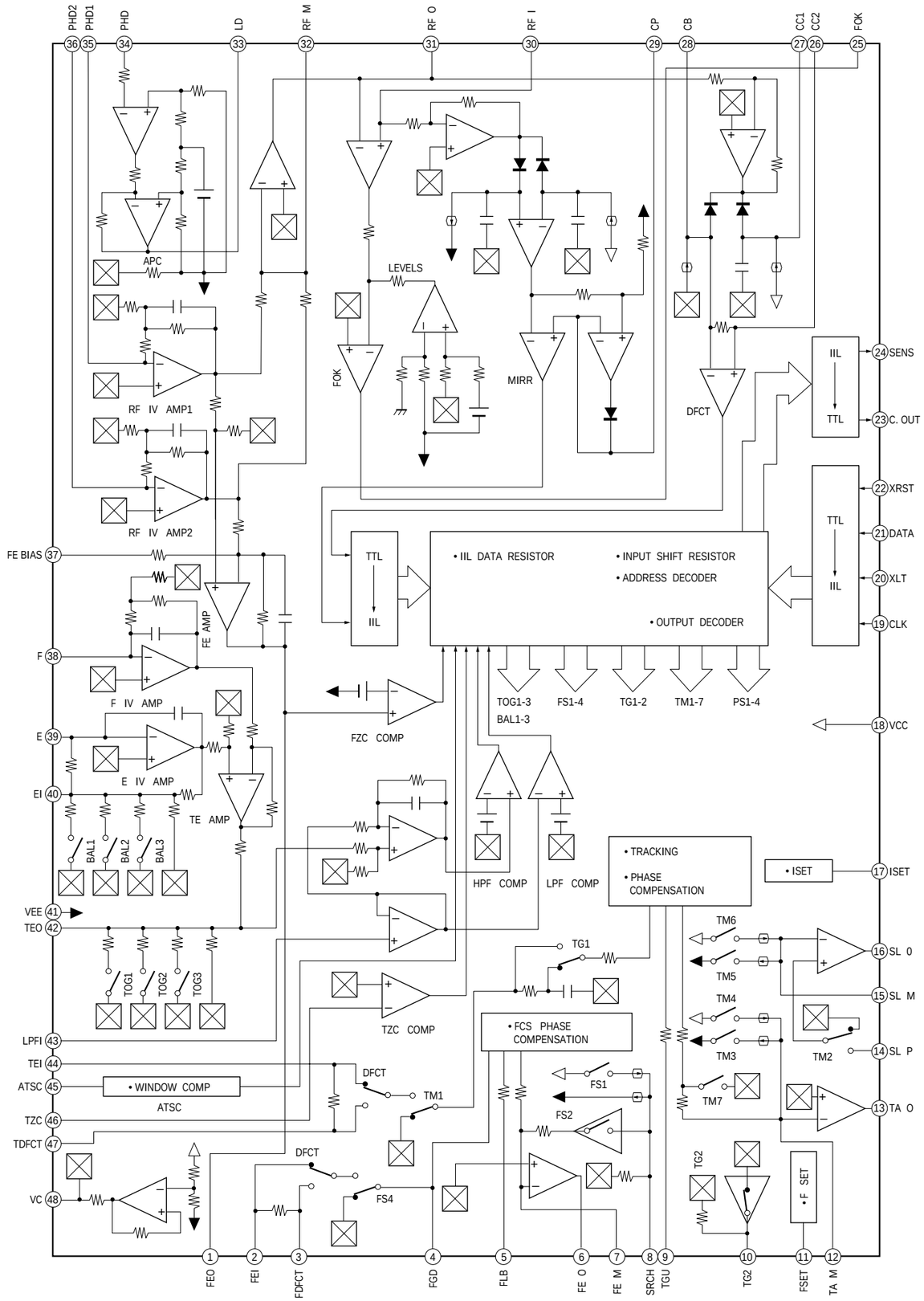
IC1 TA2008AN



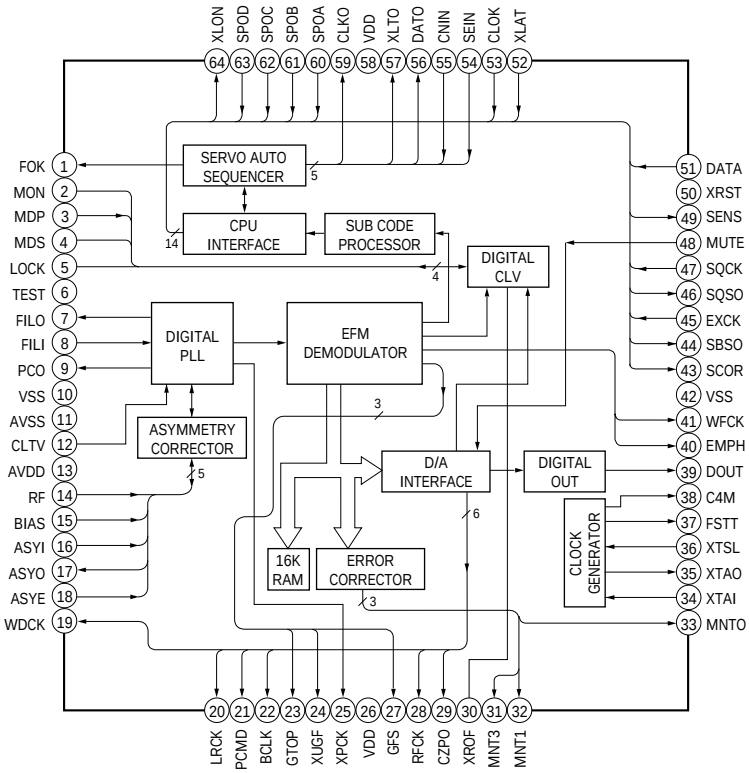
IC2 BU2614



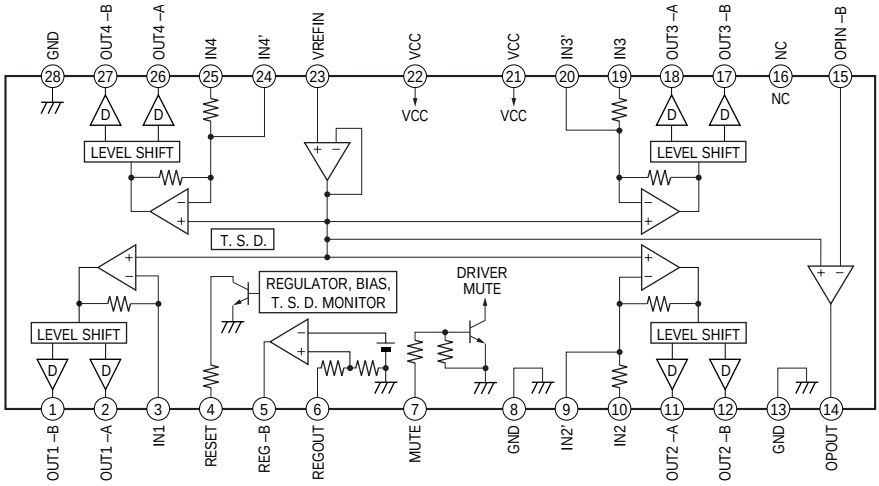
IC701 CXA1782CQ



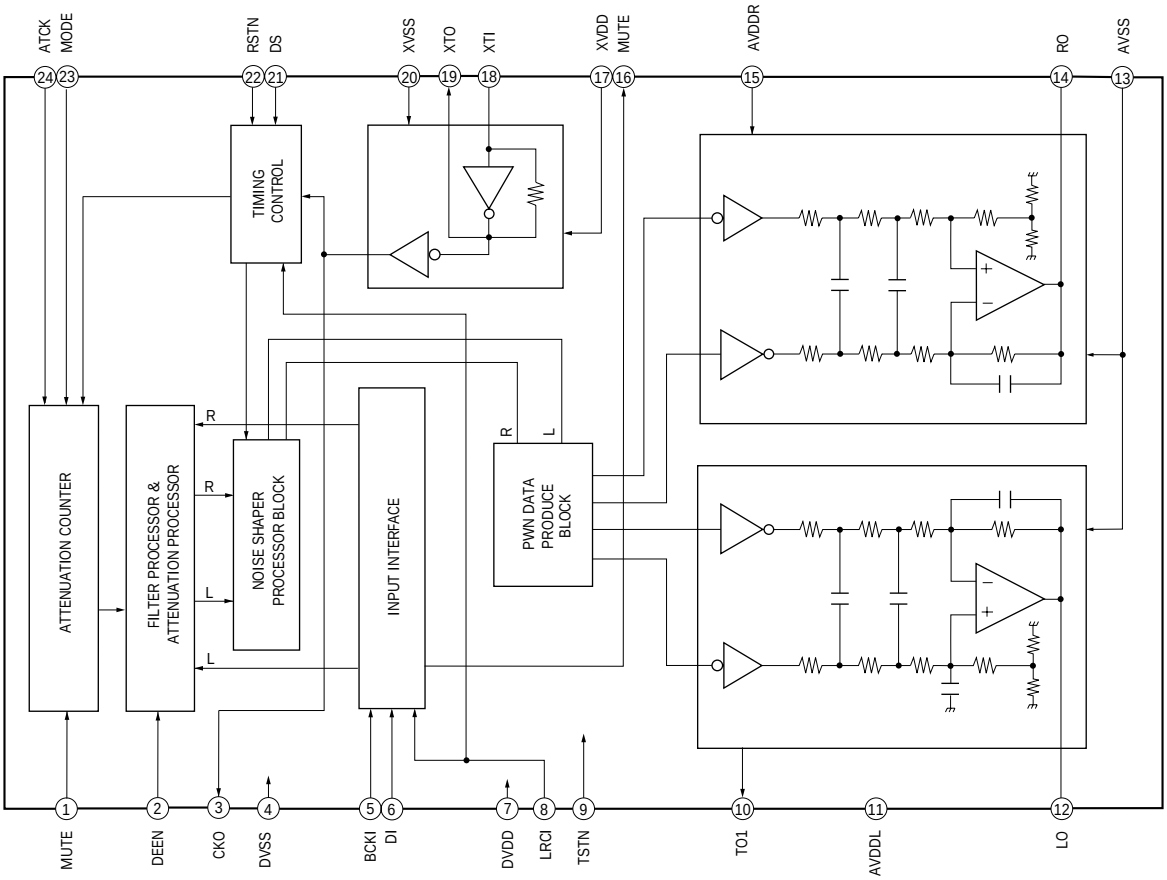
IC702 CXD2507AQ



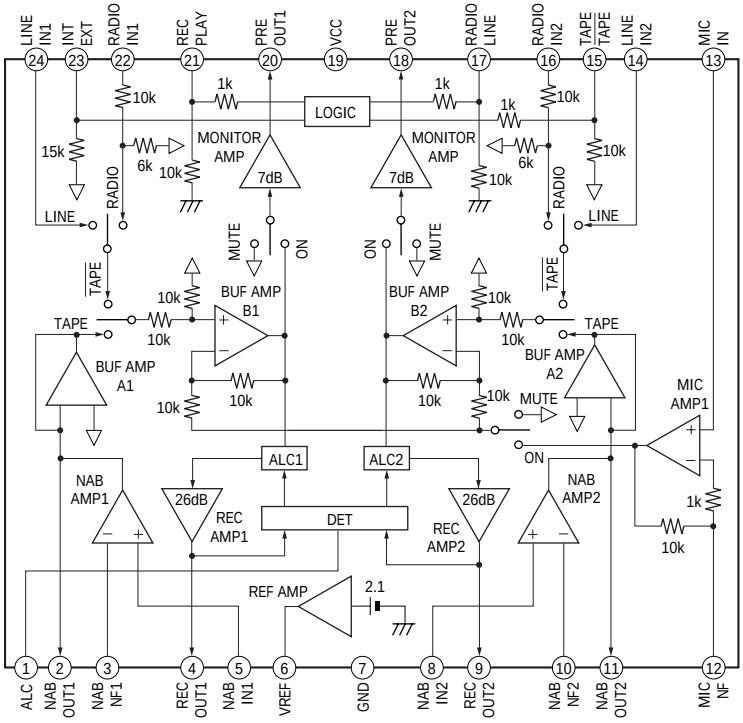
IC703 BA6898FP



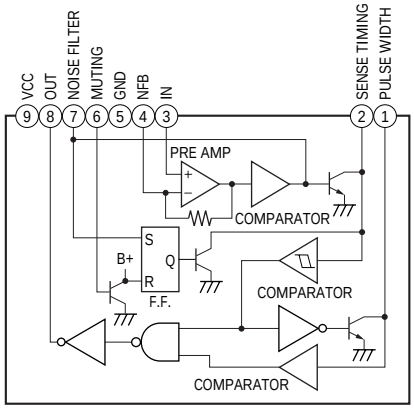
IC704 SM5877AM



IC301 TA2068N



IC305 BA338



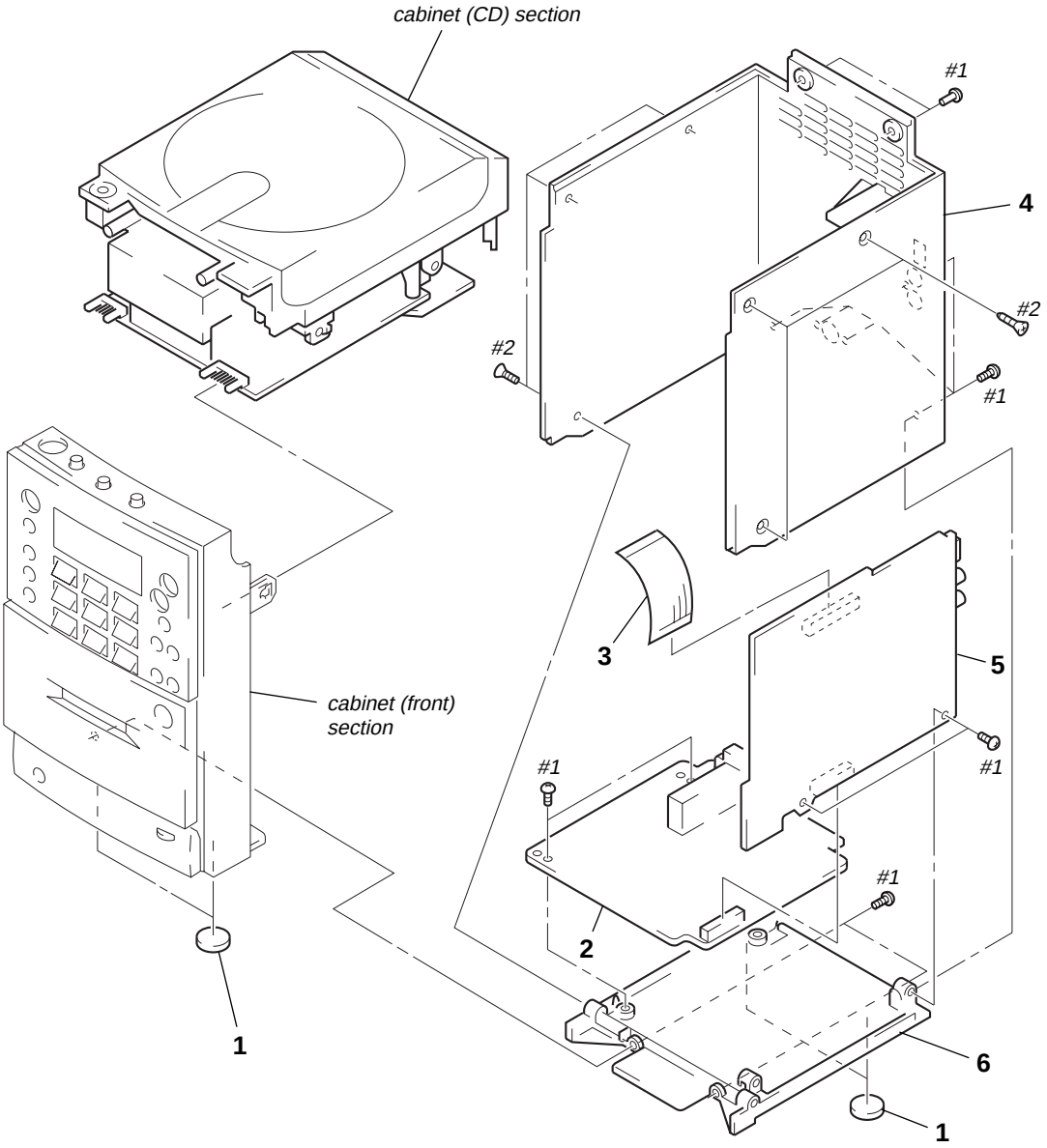
SECTION 7
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

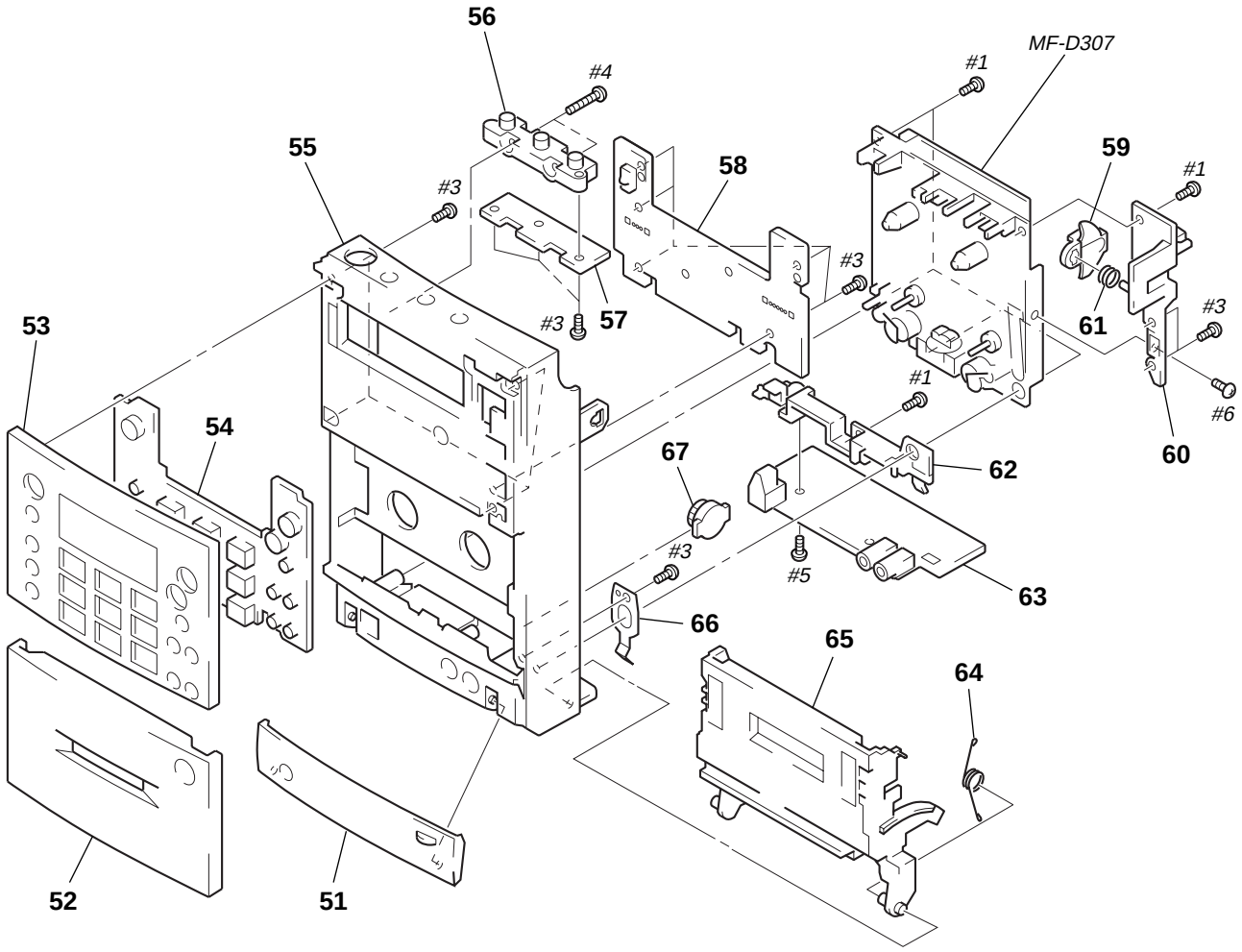
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

7-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
1	3-014-503-01	FOOT	
* 2	A-3321-639-A	TUNER BOARD, COMPLETE	
3	1-782-296-11	WIRE, PARALLEL (FFC) (27 CORE)	
4	3-014-125-11	CABINET (REAR)	
* 5	A-3321-640-A	AUDIO BOARD, COMPLETE	
6	3-014-127-01	CASE (LOWER)	

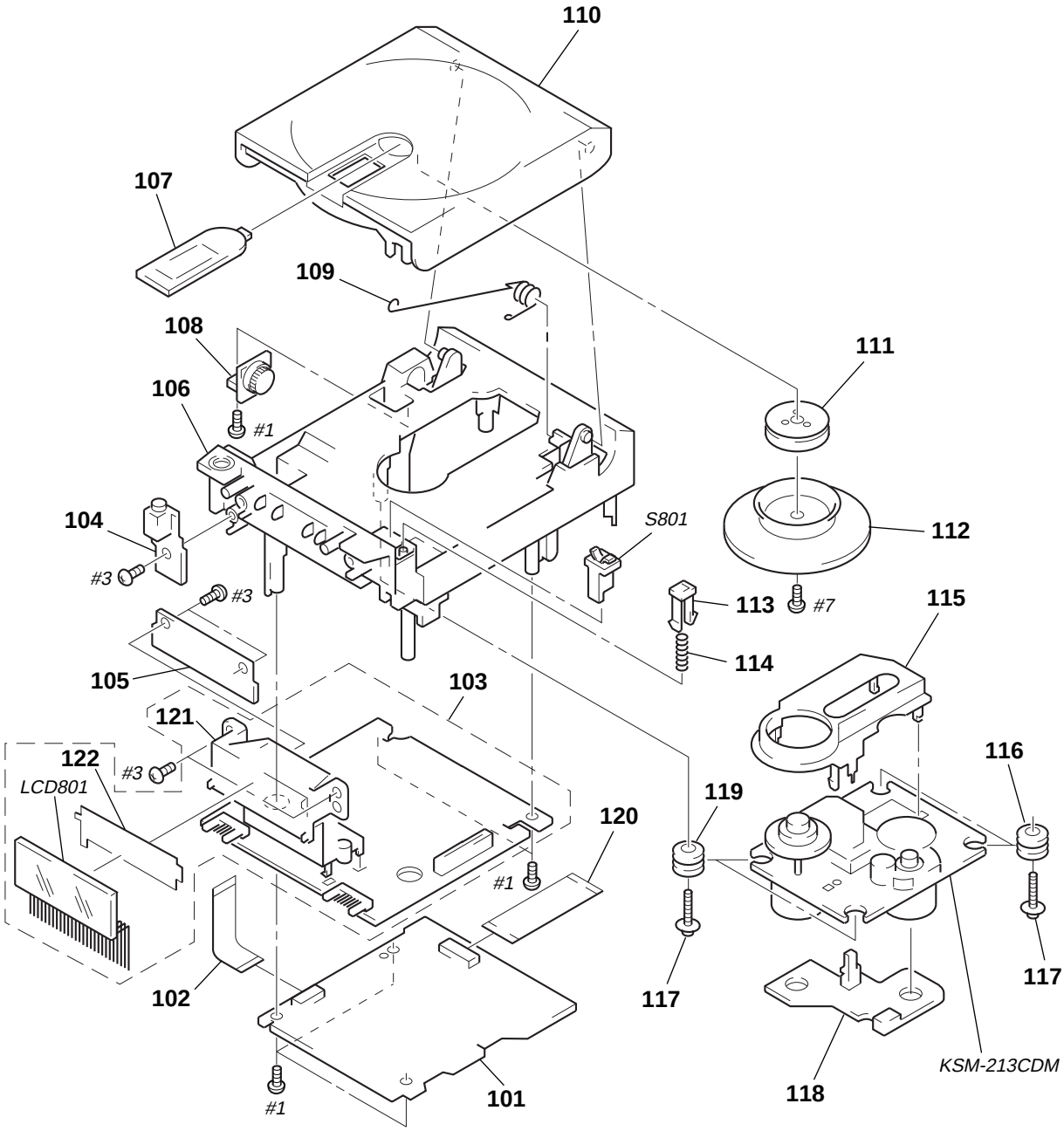
7-2. CABINET (FRONT) SECTION



Ref. No.	Part No.	Description	Remark
51	X-3373-799-1	LID (TERMINAL) ASSY	
52	X-3376-303-1	LID ASSY, CASSETTE	
53	X-3374-254-1	PANEL (FRONT) ASSY	
54	3-014-091-11	BUTTON (MAIN)	
55	3-014-090-01	CABINET (FRONT)	
56	3-014-092-11	BUTTON (UPPER)	
* 57	1-666-185-11	SW (B) BOARD	
* 58	1-666-184-11	SW (A) BOARD	
59	3-014-097-01	PLATE (CASSETTE), LOCK	

Ref. No.	Part No.	Description	Remark
60	3-014-098-01	RETAINER (CASSETTE), LOCK	
61	3-013-735-01	SPRING, COMPRESSION	
62	3-014-100-01	HOLDER (TERMINAL)	
* 63	A-3321-638-A	LINE BOARD, COMPLETE	
64	3-014-102-01	SPRING (CASSETTE)	
65	3-014-096-01	HOLDER (CASSETTE)	
66	3-014-103-01	SPRING (TERMINAL LID)	
67	3-343-248-01	DAMPER (P), SMALL	

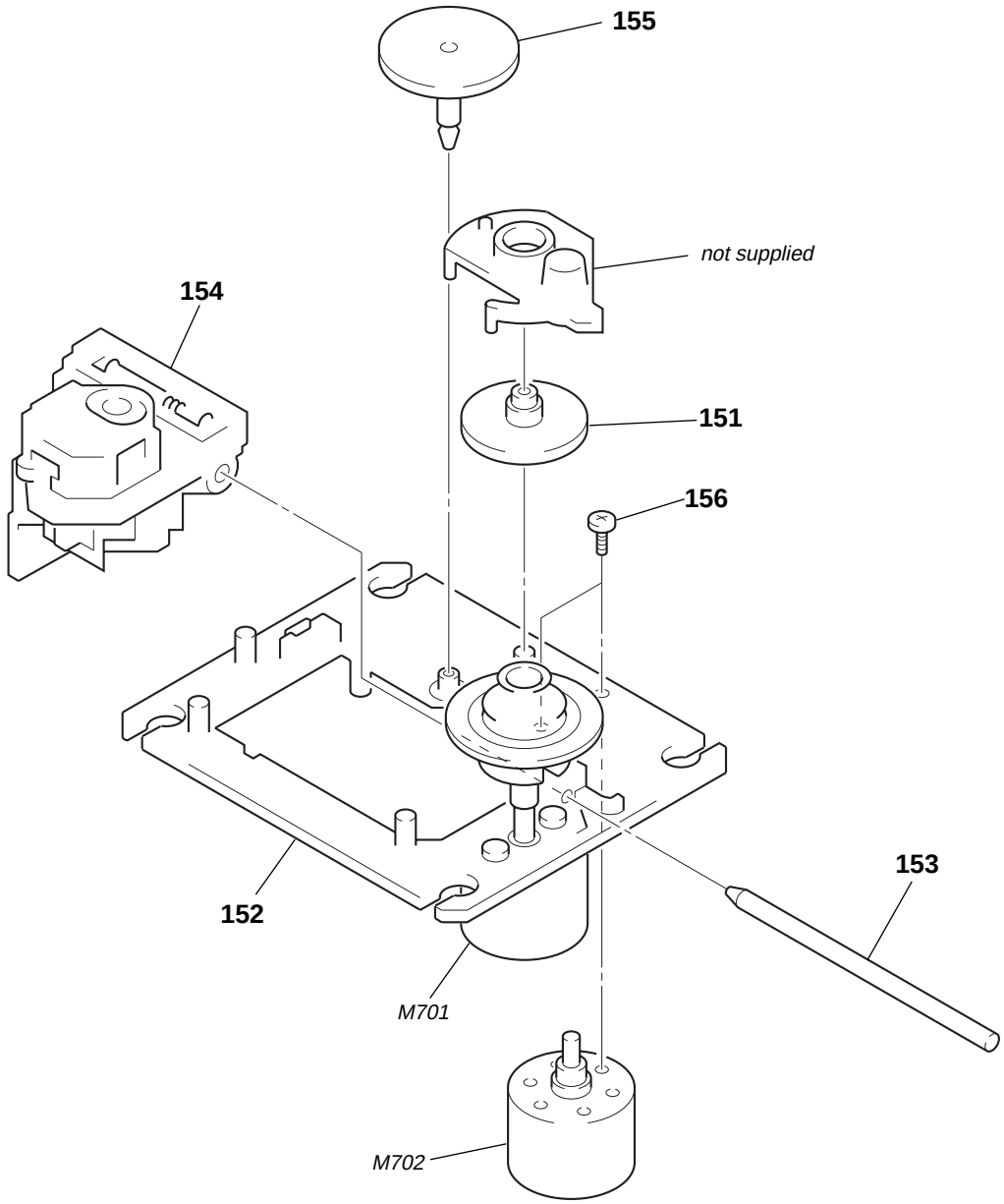
7-3. CABINET (CD) SECTION



Ref. No.	Part No.	Description	Remark
* 101	A-3321-641-A	CD BOARD, COMPLETE	
102	1-782-294-11	WIRE, PARALLEL (FFC) (9 CORE)	
* 103	A-3321-643-A	CONTROL BOARD, COMPLETE	
* 104	1-666-187-11	HEADPHONE BOARD	
* 105	1-666-186-11	LAMP BOARD	
106	3-014-123-01	CABINET (CD)	
107	3-014-129-01	WINDOW (CD)	
108	3-351-377-11	DAMPER	
109	3-014-128-01	SPRING (CD)	
110	3-014-124-01	LID (CD)	
111	1-452-732-11	MAGNET	
112	3-910-112-01	PLATE (KSM-213-CDM), CHUCKING	

Ref. No.	Part No.	Description	Remark
113	3-014-131-01	LEVER	
* 114	3-014-132-01	SPRING, COMPRESSION	
115	3-910-116-01	COVER, CD	
116	3-910-095-31	RUBBER, VIBRATION PROOF	
117	3-916-006-01	SCREW (2.6X16)	
118	1-658-023-31	CD MOTOR BOARD	
119	3-931-379-01	RUBBER, VIBRATION PROOF	
120	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
* 121	3-014-121-01	HOLDER (LCD)	
* 122	3-014-130-01	SHEET, DIFFUSION	
LCD801	1-801-786-11	DISPLAY PANEL, LIQUID CRYSTAL	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (⏏ PUSH OPEN/CLOSE)	

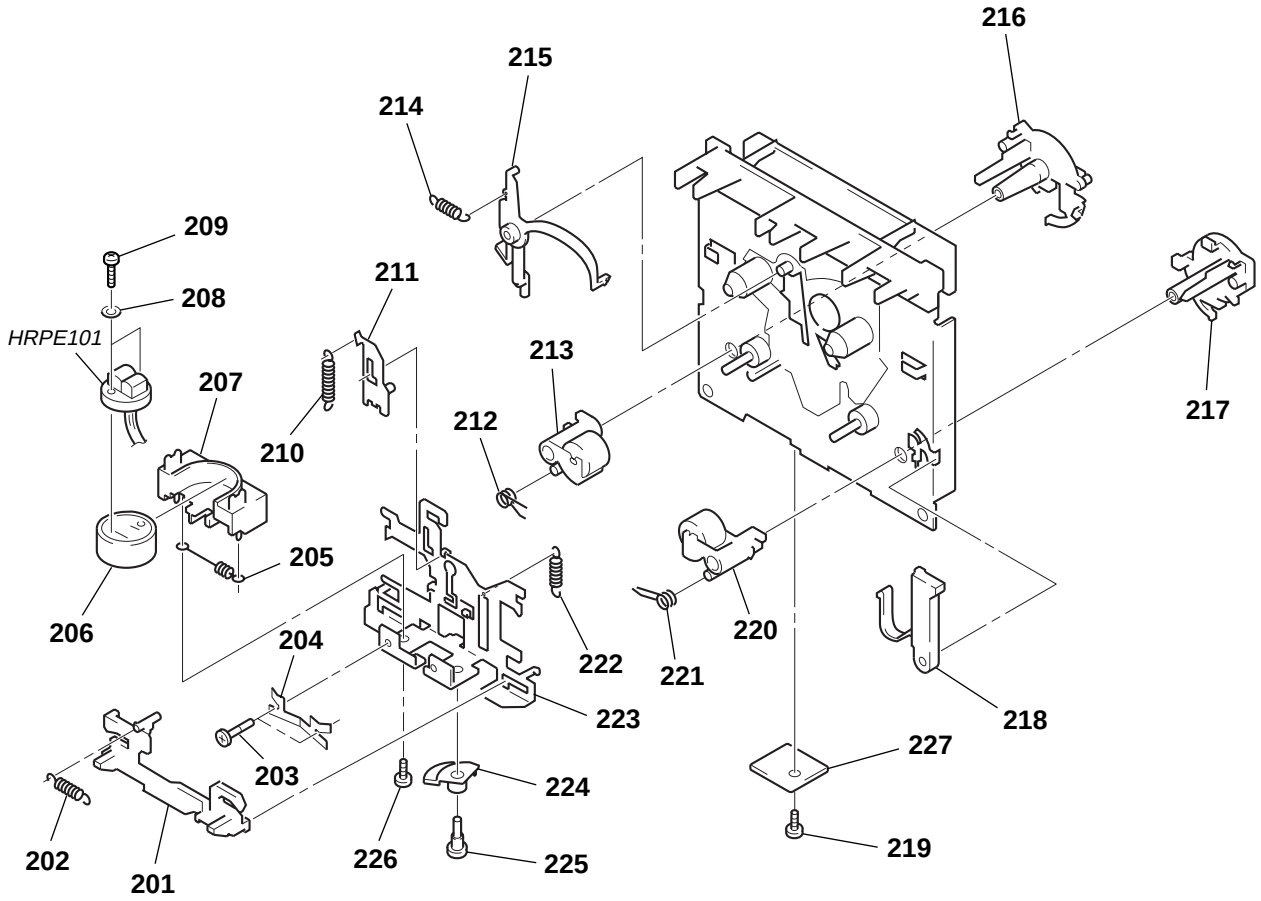
7-4. OPTICAL PICK-UP SECTION (KSM-213CDM)



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
151	2-627-003-02	GEAR (B) (RP)	
152	X-2626-202-1	CHASSIS ASSY (MB), MOTOR (SPINDLE) (including M701)	
153	2-626-908-01	SHAFT, SLED	
⚠154	8-848-483-05	PICK-UP, OPTICAL KSS-213C/Q-RP	
155	2-626-907-01	GEAR (A)	
156	3-713-786-51	SCREW +P 2X3	
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	

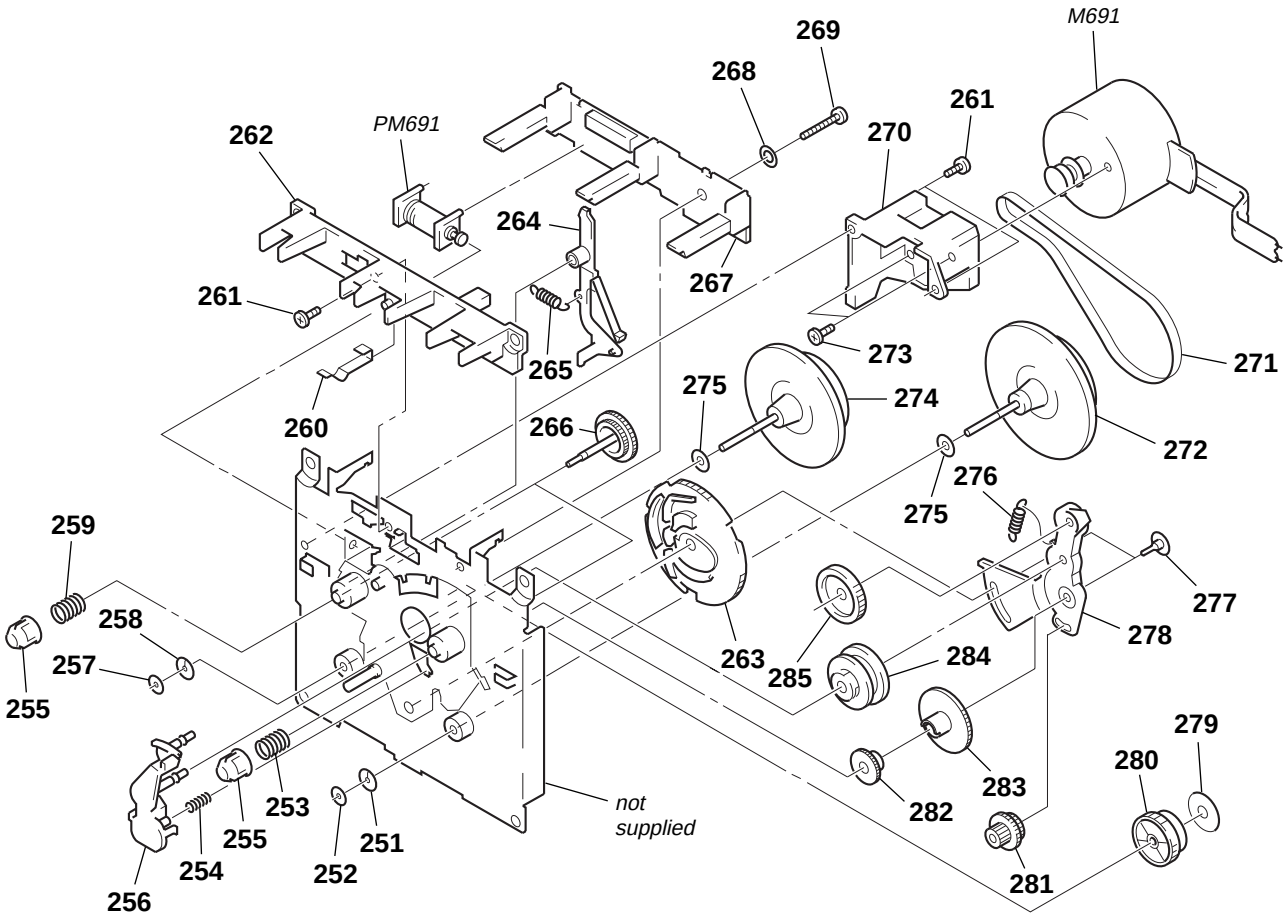
7-5. TAPE MECHANISM DECK SECTION-1 (MF-D307)



Ref. No.	Part No.	Description	Remark
201	3-938-905-01	HEAD, LEVER	
202	3-938-940-01	SPRING (L)	
203	3-938-941-01	SCREW (A)	
204	3-938-906-01	AZIMUTH, SPRING	
205	3-017-432-01	SPRING (A)	
206	3-938-901-01	HEAD, HOLDER	
* 207	3-938-904-01	HEAD, FRAME	
208	3-938-902-01	WASHER	
209	3-938-903-01	SCREW	
210	3-938-935-01	SPRING (G)	
* 211	X-3372-610-1	ASSIST ASSY, LEVER	
212	3-938-933-01	SPRING (E)	
213	3-017-592-01	ARM (PINCH L) ASSY	
214	3-938-934-01	SPRING (F)	

Ref. No.	Part No.	Description	Remark
* 215	3-938-916-01	BRAKE, ARM	
* 216	3-938-914-01	FRAME (C)	
* 217	3-938-913-01	FRAME (B)	
* 218	3-938-909-01	LOCK, EJECT	
219	3-938-944-01	SCREW (D)	
220	3-017-591-01	ARM (PINCH R) ASSY	
221	3-938-937-01	SPRING (I)	
222	3-938-938-01	SPRING (J)	
* 223	3-938-911-01	HEAD (B), CHASSIS	
224	3-938-907-01	HEAD, GEAR ARM	
225	3-938-943-01	SCREW (C)	
226	3-938-942-01	SCREW (B)	
* 227	1-662-743-11	HEAD BOARD	
HRPE101	1-500-480-11	HEAD, MAGNETIC (REC/PB/ERASE)	

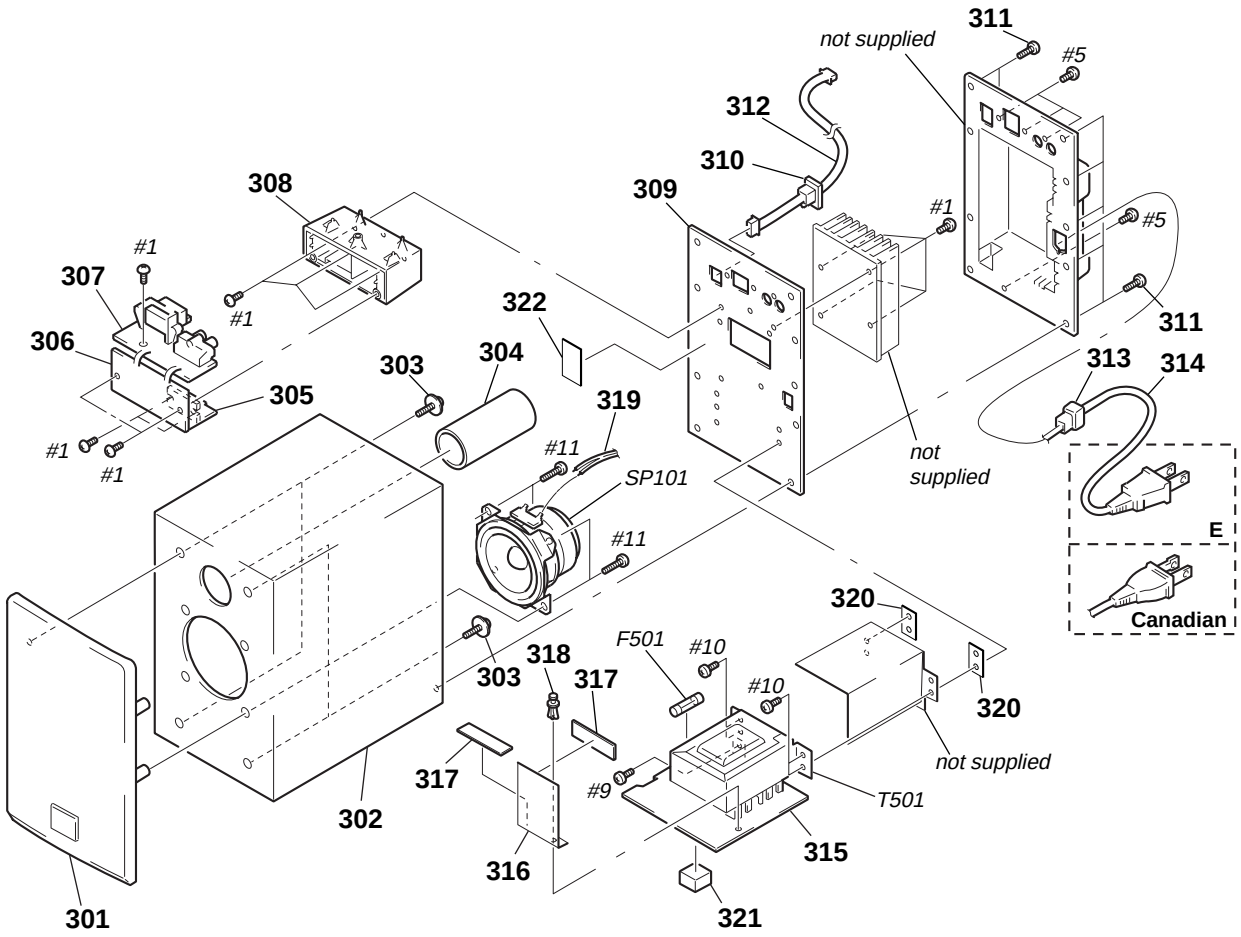
7-6. TAPE MECHANISM DECK SECTION-2 (MF-D307)



Ref. No.	Part No.	Description	Remark
251	3-938-949-01	WASHER (B)	
252	3-938-951-01	WASHER (D)	
253	3-938-936-01	SPRING (H)	
254	3-938-930-01	SPRING (B)	
255	3-938-910-01	REEL, CAP	
* 256	3-938-912-01	ARM (UD)	
257	3-938-952-01	WASHER (E)	
258	3-938-948-01	WASHER (A)	
259	3-938-932-01	SPRING (D)	
260	3-938-908-01	CASSETTE, SPRING	
261	3-938-945-01	SCREW (E)	
262	3-017-428-01	FRAME (D)	
263	3-938-922-01	GEAR (CAM)	
* 264	3-938-918-01	TRIGGER, ARM	
265	3-938-931-01	SPRING (C)	
266	3-938-921-01	GEAR (REEL)	
* 267	1-662-742-11	SW BOARD	
268	3-938-954-01	WASHER (G)	
269	3-938-947-01	SCREW (G)	

Ref. No.	Part No.	Description	Remark
270	3-017-431-01	BRACKET (MM)	
271	3-017-430-01	BELT	
272	3-017-596-01	FLYWHEEL (R) ASSY	
273	3-017-434-01	SCREW (H)	
274	3-017-595-01	FLYWHEEL (L) ASSY	
275	3-938-950-01	WASHER (C)	
276	3-017-433-01	SPRING (K)	
277	3-938-946-01	SCREW (F)	
* 278	3-938-919-01	ARM (FR)	
279	3-017-435-01	REFLECTOR	
280	3-017-429-01	GEAR (REF)	
281	3-938-917-01	GEAR (A)	
282	3-938-924-01	GEAR (P)	
283	3-938-923-01	GEAR (FR)	
284	X-3372-613-1	CLUTCH ASSY	
285	3-938-925-01	GEAR (IDL)	
M691	3-016-425-01	MOTOR ASSY (CAPSTAN/REEL) (including PULLEY)	
PM691	1-454-806-11	SOLENOID, PLUNGER	

7-7. SPEAKER (L) SECTION

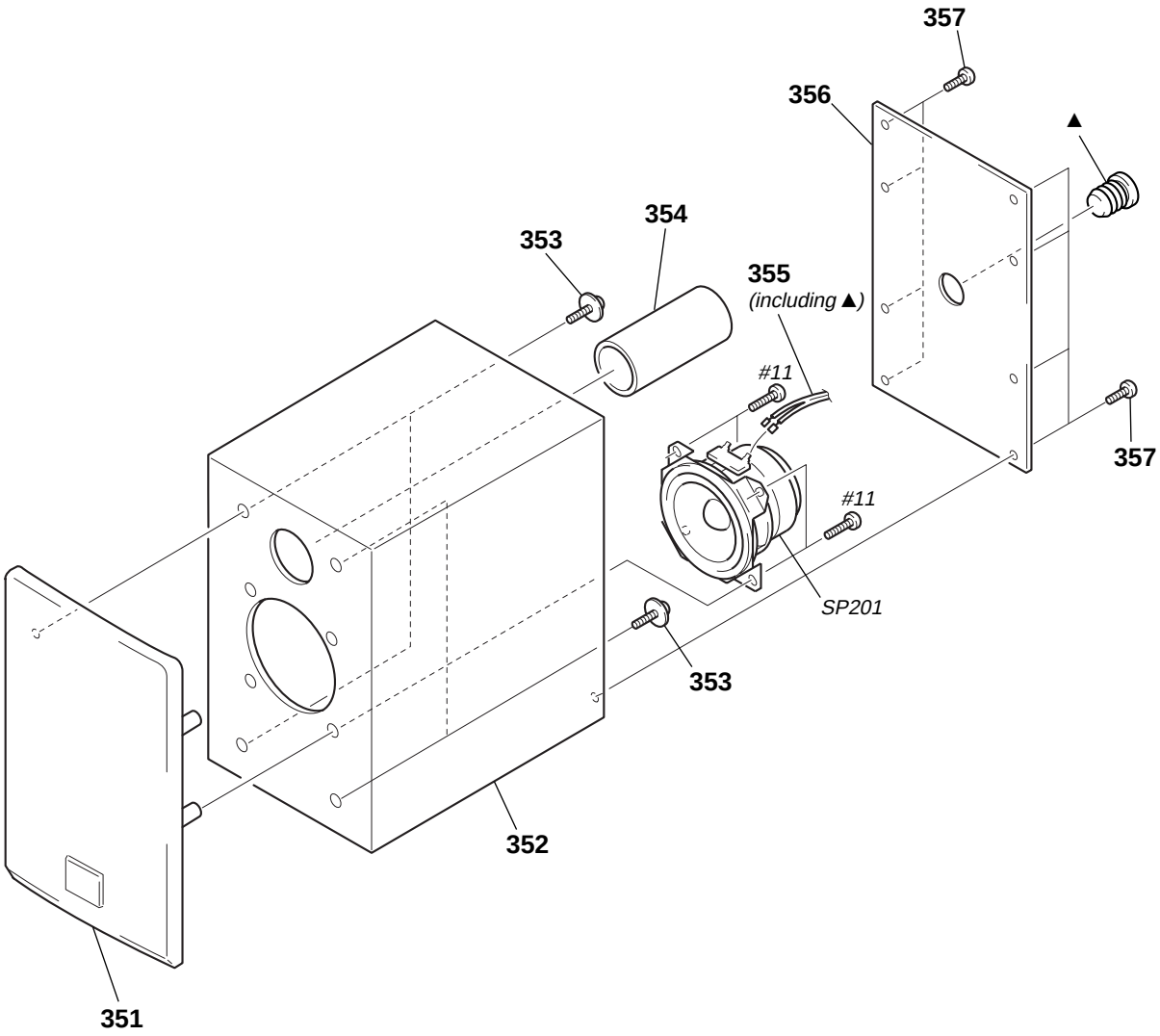


The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
301	X-3376-076-1	SPEAKER (FRONT) SUB ASSY	
302	3-028-031-11	BOX, SPEAKER	
303	3-365-853-01	SCREW (+BTPWH) (3X12)	
304	3-028-028-01	DUCT (SP)	
* 305	1-671-065-23	AMPLIFIER BOARD	
* 306	1-671-066-23	TERMINAL BOARD	
* 307	1-671-068-23	JACK BOARD	
308	3-028-034-01	BRACKET (AMP)	
309	3-028-029-01	CHASSIS (L), REAR	
* 310	3-014-106-01	BUSHING (4P), CORD	
311	3-029-171-01	SCREW, +B TAPPING	
312	X-3374-496-1	CORD ASSY	
313	3-703-244-11	BUSHING (2104), CORD	

Ref. No.	Part No.	Description	Remark
⚠ 314	1-575-653-11	CORD, POWER (E)	
⚠ 314	1-769-743-11	CORD, POWER (Canadian)	
* 315	1-671-064-21	POWER BOARD	
* 316	3-017-037-01	INSULATOR	
317	3-568-749-00	CUSHION, ECM	
318	4-812-134-11	RIVET (DIA. 3.5), NYLON	
319	1-790-161-11	CORD, SPEAKER	
320	3-031-458-01	PLATE (PT), RETAINER	
321	3-031-459-01	CUSHION (PT), RUBBER	
* 322	3-703-044-26	LABEL, CAUTION (Canadian)	
⚠ F501	1-533-623-11	FUSE, GLASS CYLINDERICAL (10A/125V)	
SP101	1-505-607-11	SPEAKER (8cm)	
⚠ T501	1-431-354-11	TRANSFORMER, POWER	

7-8. SPEAKER (R) SECTION



Ref. No.	Part No.	Description	Remark
351	X-3376-076-1	SPEAKER (FRONT) SUB ASSY	
352	3-028-031-11	BOX, SPEAKER	
353	3-365-853-01	SCREW (+BTPWH) (3X12)	
354	3-028-028-01	DUCT (SP)	

Ref. No.	Part No.	Description	Remark
355	1-790-161-11	CORD, SPEAKER	
356	3-028-030-11	CHASSIS (R), REAR	
357	3-029-171-01	SCREW, +B TAPPING	
SP201	1-505-607-11	SPEAKER (8cm)	

SECTION 8
ELECTRICAL PARTS LIST

AMPLIFIER **AUDIO**

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description				Remark
*	1-671-065-23	AMPLIFIER BOARD				
		**********				
		< CAPACITOR >				
C181	1-126-960-11	ELECT	1uF	20%	50V	
C182	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C184	1-130-495-00	MYLAR	0.1uF	5%	50V	
C185	1-130-495-00	MYLAR	0.1uF	5%	50V	
C281	1-126-960-11	ELECT	1uF	20%	50V	
C282	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C382	1-104-665-11	ELECT	100uF	20%	10V	
C385	1-104-664-11	ELECT	47uF	20%	25V	
C386	1-126-964-11	ELECT	10uF	20%	50V	
		< IC >				
IC309	8-759-333-16	IC LA4705NA				
		< RESISTOR >				
R181	1-249-427-11	CARBON	6.8K	5%	1/4W	
R182	1-249-431-11	CARBON	15K	5%	1/4W	
⚠R183	1-249-385-11	CARBON	2.2	5%	1/6W	F
⚠R184	1-249-385-11	CARBON	2.2	5%	1/6W	F
R281	1-249-427-11	CARBON	6.8K	5%	1/4W	
R282	1-249-431-11	CARBON	15K	5%	1/4W	
R381	1-249-425-11	CARBON	4.7K	5%	1/4W	
R383	1-249-417-11	CARBON	1K	5%	1/4W	
**********						
*	A-3321-640-A	AUDIO BOARD, COMPLETE				
		**********				
	7-685-871-01	SCREW +BVTT 3X6 (S)				
		< CAPACITOR >				
C101	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C102	1-104-664-11	ELECT	47uF	20%	10V	
C103	1-137-442-11	FILM	0.039uF	5%	50V	
C104	1-162-302-11	CERAMIC	0.0022uF	20%	16V	
C105	1-162-215-31	CERAMIC	47PF	5%	50V	
C106	1-126-959-11	ELECT	0.47uF	20%	50V	
C108	1-126-959-11	ELECT	0.47uF	20%	50V	
C112	1-126-964-11	ELECT	10uF	20%	50V	
C141	1-126-964-11	ELECT	10uF	20%	50V	
C142	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C143	1-126-964-11	ELECT	10uF	20%	50V	

Ref. No.	Part No.	Description				Remark
C144	1-162-849-11	CERAMIC	0.068uF	10%	16V	
C145	1-162-849-11	CERAMIC	0.068uF	10%	16V	
C146	1-162-839-11	CERAMIC	0.01uF	10%	16V	
C147	1-126-960-11	ELECT	1uF	20%	50V	
C152	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C153	1-104-664-11	ELECT	47uF	20%	10V	
C155	1-107-909-11	ELECT	47uF	20%	10V	
C156	1-162-282-31	CERAMIC	100PF	10%	50V	
C201	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C202	1-104-664-11	ELECT	47uF	20%	10V	
C203	1-137-442-11	FILM	0.039uF	5%	50V	
C204	1-162-302-11	CERAMIC	0.0022uF	20%	16V	
C205	1-162-215-31	CERAMIC	47PF	5%	50V	
C206	1-126-959-11	ELECT	0.47uF	20%	50V	
C208	1-126-959-11	ELECT	0.47uF	20%	50V	
C212	1-126-964-11	ELECT	10uF	20%	50V	
C241	1-126-964-11	ELECT	10uF	20%	50V	
C242	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C243	1-126-964-11	ELECT	10uF	20%	50V	
C244	1-162-849-11	CERAMIC	0.068uF	10%	16V	
C245	1-162-849-11	CERAMIC	0.068uF	10%	16V	
C246	1-162-839-11	CERAMIC	0.01uF	10%	16V	
C247	1-126-960-11	ELECT	1uF	20%	50V	
C252	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C253	1-104-664-11	ELECT	47uF	20%	10V	
C255	1-107-909-11	ELECT	47uF	20%	10V	
C256	1-162-282-31	CERAMIC	100PF	10%	50V	
C301	1-104-665-11	ELECT	100uF	20%	10V	
C302	1-126-925-11	ELECT	470uF	20%	10V	
C303	1-126-963-11	ELECT	4.7uF	20%	50V	
C304	1-104-665-11	ELECT	100uF	20%	10V	
C307	1-161-494-00	CERAMIC	0.022uF		25V	
C311	1-162-305-11	CERAMIC	0.0068uF	30%	16V	
C312	1-104-664-11	ELECT	47uF	20%	10V	
C313	1-137-350-11	MYLAR	0.015uF	10%	100V	
C314	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C315	1-162-305-11	CERAMIC	0.0068uF	30%	16V	
C316	1-162-302-11	CERAMIC	0.0022uF	20%	16V	
C324	1-126-961-11	ELECT	2.2uF	20%	50V	
C325	1-126-961-11	ELECT	2.2uF	20%	50V	
C326	1-126-963-11	ELECT	4.7uF	20%	50V	
C327	1-104-664-11	ELECT	47uF	20%	10V	
C328	1-126-959-11	ELECT	0.47uF	20%	50V	
C329	1-137-189-11	FILM	0.18uF	5%	50V	
C333	1-104-664-11	ELECT	47uF	20%	10V	

AUDIO

Ref. No.	Part No.	Description			Remark
C334	1-126-963-11	ELECT	4.7uF	20%	50V
C335	1-126-960-11	ELECT	1uF	20%	50V
C336	1-126-961-11	ELECT	2.2uF	20%	50V
C337	1-104-665-11	ELECT	100uF	20%	10V
C338	1-161-494-00	CERAMIC	0.022uF		25V
C339	1-161-494-00	CERAMIC	0.022uF		25V
C340	1-162-290-31	CERAMIC	470PF	10%	50V
C341	1-162-290-31	CERAMIC	470PF	10%	50V
C342	1-162-290-31	CERAMIC	470PF	10%	50V
C344	1-162-282-31	CERAMIC	100PF	10%	50V
C345	1-162-306-11	CERAMIC	0.01uF	30%	16V
C346	1-162-306-11	CERAMIC	0.01uF	30%	16V
C347	1-126-925-11	ELECT	470uF	20%	10V
C348	1-126-959-11	ELECT	0.47uF	20%	50V
C351	1-104-652-11	ELECT	470uF	20%	10V
C352	1-104-665-11	ELECT	100uF	20%	10V
C353	1-126-940-11	ELECT	330uF	20%	25V
C355	1-104-664-11	ELECT	47uF	20%	10V
C356	1-161-494-00	CERAMIC	0.022uF		25V
C357	1-104-665-11	ELECT	100uF	20%	10V
C358	1-161-494-00	CERAMIC	0.022uF		25V
C359	1-126-964-11	ELECT	10uF	20%	50V
C360	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
* CN301	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CN303	1-569-312-11	SOCKET, CONNECTOR (L TYPE) 27P			
* CNP301	1-793-024-11	PIN, CONNECTOR (PC BOARD) 4P (POWER IN)			
CNP302	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
* CNP304	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CNP305	1-573-826-11	CONNECTOR, BOARD TO BOARD 12P			
* CNP306	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
* CNP307	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
		< DIODE >			
D301	8-719-991-33	DIODE 1SS133T-77			
D302	8-719-911-19	DIODE 1SS119			
D304	8-719-991-33	DIODE 1SS133T-77			
D305	8-719-991-33	DIODE 1SS133T-77			
D307	8-719-991-33	DIODE 1SS133T-77			
D308	8-719-991-33	DIODE 1SS133T-77			
D309	8-719-991-33	DIODE 1SS133T-77			
D310	8-719-991-33	DIODE 1SS133T-77			
D311	8-719-110-09	DIODE RD8.2ES-B3			
D312	8-719-991-33	DIODE 1SS133T-77			
D313	8-719-109-89	DIODE RD5.6ESB2			
D314	8-719-991-33	DIODE 1SS133T-77			
D315	8-719-921-89	DIODE MTZJ-13C			
D316	8-719-991-33	DIODE 1SS133T-77			
D317	8-719-991-33	DIODE 1SS133T-77			
D318	8-719-991-33	DIODE 1SS133T-77			
D319	8-719-991-33	DIODE 1SS133T-77			
D320	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC301	8-759-264-71	IC TA2068N			
IC302	8-759-432-41	IC BH3854AS			
IC303	8-759-701-54	IC NJM2073D			
IC305	8-759-905-47	IC BA338			
		< JACK >			
J302	1-770-612-12	JACK, PIN 2P (SIGNAL OUTPUT)			
		< RESISTOR >			
L154	1-247-807-11	CARBON	100	5%	1/4W
L254	1-247-807-11	CARBON	100	5%	1/4W
		< CONNECTOR >			
* P301	1-564-187-00	PIN, CONNECTOR			
* P302	1-564-187-00	PIN, CONNECTOR			
		< TRANSISTOR >			
Q102	8-729-900-74	TRANSISTOR DTC143TS			
Q103	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q131	8-729-900-74	TRANSISTOR DTC143TS			
Q132	8-729-900-74	TRANSISTOR DTC143TS			
Q202	8-729-900-74	TRANSISTOR DTC143TS			
Q203	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q231	8-729-900-74	TRANSISTOR DTC143TS			
Q232	8-729-900-74	TRANSISTOR DTC143TS			
Q301	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q302	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q303	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q304	8-729-422-57	TRANSISTOR UN4111			
Q305	8-729-900-80	TRANSISTOR DTC114ES			
Q306	8-729-900-80	TRANSISTOR DTC114ES			
Q307	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q308	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q309	8-729-036-86	TRANSISTOR KTC3203Y-AT			
Q310	8-729-900-80	TRANSISTOR DTC114ES			
Q311	8-729-195-23	TRANSISTOR 2SA952			
Q312	8-729-900-80	TRANSISTOR DTC114ES			
Q313	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q314	8-729-900-80	TRANSISTOR DTC114ES			
Q315	8-729-209-15	TRANSISTOR 2SD2012			
Q316	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q317	8-729-900-80	TRANSISTOR DTC114ES			
Q318	8-729-209-15	TRANSISTOR 2SD2012			
Q319	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2			
Q320	8-729-195-23	TRANSISTOR 2SA952			
Q323	8-729-265-52	TRANSISTOR 2SC2655			
Q324	8-729-422-57	TRANSISTOR UN4111			
Q325	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q326	8-729-422-57	TRANSISTOR UN4111			
Q327	8-729-900-80	TRANSISTOR DTC114ES			
Q328	8-729-900-80	TRANSISTOR DTC114ES			

Ref. No.	Part No.	Description			Remark
Q329	8-729-194-57	TRANSISTOR	2SC945-P		
Q330	8-729-194-57	TRANSISTOR	2SC945-P		
Q331	8-729-900-80	TRANSISTOR	DTC114ES		
Q332	8-729-422-57	TRANSISTOR	UN4111		
Q333	8-729-422-57	TRANSISTOR	UN4111		
Q334	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q335	8-729-422-57	TRANSISTOR	UN4111		
		< RESISTOR >			
R101	1-249-431-11	CARBON	15K	5%	1/4W
R102	1-249-404-00	CARBON	82	5%	1/4W
R103	1-249-441-11	CARBON	100K	5%	1/4W
R104	1-247-843-11	CARBON	3.3K	5%	1/4W
R110	1-247-807-11	CARBON	100	5%	1/4W
R111	1-247-887-00	CARBON	220K	5%	1/4W
R112	1-249-437-11	CARBON	47K	5%	1/4W
R114	1-249-417-11	CARBON	1K	5%	1/4W
R115	1-249-417-11	CARBON	1K	5%	1/4W
R116	1-249-437-11	CARBON	47K	5%	1/4W
R127	1-249-437-11	CARBON	47K	5%	1/4W
R140	1-249-425-11	CARBON	4.7K	5%	1/4W
R145	1-249-429-11	CARBON	10K	5%	1/4W
R146	1-249-417-11	CARBON	1K	5%	1/4W
R151	1-249-429-11	CARBON	10K	5%	1/4W
R152	1-249-425-11	CARBON	4.7K	5%	1/4W
R153	1-249-417-11	CARBON	1K	5%	1/4W
R155	1-247-887-00	CARBON	220K	5%	1/4W
R156	1-249-425-11	CARBON	4.7K	5%	1/4W
R201	1-249-431-11	CARBON	15K	5%	1/4W
R202	1-249-404-00	CARBON	82	5%	1/4W
R203	1-249-441-11	CARBON	100K	5%	1/4W
R204	1-247-843-11	CARBON	3.3K	5%	1/4W
R210	1-247-807-11	CARBON	100	5%	1/4W
R211	1-247-887-00	CARBON	220K	5%	1/4W
R212	1-249-437-11	CARBON	47K	5%	1/4W
R214	1-249-417-11	CARBON	1K	5%	1/4W
R215	1-249-417-11	CARBON	1K	5%	1/4W
R216	1-249-437-11	CARBON	47K	5%	1/4W
R227	1-249-437-11	CARBON	47K	5%	1/4W
R240	1-249-425-11	CARBON	4.7K	5%	1/4W
R245	1-249-429-11	CARBON	10K	5%	1/4W
R246	1-249-417-11	CARBON	1K	5%	1/4W
R251	1-249-429-11	CARBON	10K	5%	1/4W
R252	1-249-425-11	CARBON	4.7K	5%	1/4W
R253	1-249-417-11	CARBON	1K	5%	1/4W
R255	1-247-887-00	CARBON	220K	5%	1/4W
R256	1-249-425-11	CARBON	4.7K	5%	1/4W
R301	1-247-903-00	CARBON	1M	5%	1/4W
R302	1-249-441-11	CARBON	100K	5%	1/4W
R303	1-249-429-11	CARBON	10K	5%	1/4W
R304	1-249-429-11	CARBON	10K	5%	1/4W
R305	1-249-421-11	CARBON	2.2K	5%	1/4W
R306	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R307	1-247-807-11	CARBON	100	5%	1/4W
R311	1-249-389-11	CARBON	4.7	5%	1/4W
R312	1-249-439-11	CARBON	68K	5%	1/4W
R313	1-249-389-11	CARBON	4.7	5%	1/4W
R314	1-249-429-11	CARBON	10K	5%	1/4W
R315	1-249-429-11	CARBON	10K	5%	1/4W
R316	1-249-425-11	CARBON	4.7K	5%	1/4W
R317	1-247-807-11	CARBON	100	5%	1/4W
R318	1-249-435-11	CARBON	33K	5%	1/4W
R319	1-247-895-00	CARBON	470K	5%	1/4W
R320	1-247-903-00	CARBON	1M	5%	1/4W
R323	1-249-425-11	CARBON	4.7K	5%	1/4W
R324	1-249-417-11	CARBON	1K	5%	1/4W
R325	1-249-417-11	CARBON	1K	5%	1/4W
R327	1-249-417-11	CARBON	1K	5%	1/4W
R328	1-249-417-11	CARBON	1K	5%	1/4W
R329	1-249-417-11	CARBON	1K	5%	1/4W
R331	1-247-863-00	CARBON	22K	5%	1/4W
R332	1-249-437-11	CARBON	47K	5%	1/4W
R334	1-249-429-11	CARBON	10K	5%	1/4W
R335	1-249-425-11	CARBON	4.7K	5%	1/4W
R336	1-249-401-11	CARBON	47	5%	1/4W
R337	1-249-437-11	CARBON	47K	5%	1/4W
R338	1-249-417-11	CARBON	1K	5%	1/4W
R339	1-249-417-11	CARBON	1K	5%	1/4W
R340	1-249-417-11	CARBON	1K	5%	1/4W
R342	1-249-425-11	CARBON	4.7K	5%	1/4W
R343	1-249-429-11	CARBON	10K	5%	1/4W
R344	1-249-429-11	CARBON	10K	5%	1/4W
R345	1-249-441-11	CARBON	100K	5%	1/4W
R347	1-249-401-11	CARBON	47	5%	1/4W
R349	1-249-435-11	CARBON	33K	5%	1/4W
R351	1-249-401-11	CARBON	47	5%	1/4W
R352	1-249-428-11	CARBON	8.2K	5%	1/4W
R353	1-249-417-11	CARBON	1K	5%	1/4W
R355	1-247-885-00	CARBON	180K	5%	1/4W
R356	1-249-437-11	CARBON	47K	5%	1/4W
R357	1-249-421-11	CARBON	2.2K	5%	1/4W
R360	1-249-441-11	CARBON	100K	5%	1/4W
R361	1-247-815-00	CARBON	220	5%	1/4W
R362	1-247-807-11	CARBON	100	5%	1/4W
R363	1-249-441-11	CARBON	100K	5%	1/4W
R364	1-249-413-11	CARBON	470	5%	1/4W
R367	1-247-807-11	CARBON	100	5%	1/4W
R368	1-249-413-11	CARBON	470	5%	1/4W
R369	1-247-807-11	CARBON	100	5%	1/4W
R370	1-249-441-11	CARBON	100K	5%	1/4W
R371	1-249-421-11	CARBON	2.2K	5%	1/4W
R376	1-249-421-11	CARBON	2.2K	5%	1/4W
R377	1-249-421-11	CARBON	2.2K	5%	1/4W
R378	1-247-807-11	CARBON	100	5%	1/4W
R379	1-247-815-00	CARBON	220	5%	1/4W

AUDIO **CD**

Ref. No.	Part No.	Description			Remark
		< TRANSFORMER >			
T301	1-429-820-11	TRANSFORMER, BIAS OSCILLATION			
**********					
*	A-3321-641-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C702	1-136-165-00	FILM	0.1uF	5%	50V
C703	1-136-165-00	FILM	0.1uF	5%	50V
C704	1-136-165-00	FILM	0.1uF	5%	50V
C705	1-131-375-00	TANTALUM	4.7uF	10%	10V
C706	1-136-159-00	FILM	0.033uF	5%	50V
C707	1-136-156-00	FILM	0.018uF	5%	50V
C708	1-162-199-31	CERAMIC	10PF	5%	50V
C709	1-126-162-11	ELECT	3.3uF	20%	50V
C710	1-136-495-11	FILM	0.068uF	5%	50V
C711	1-162-215-31	CERAMIC	47PF	5%	50V
C712	1-162-306-11	CERAMIC	0.01uF	30%	16V
C713	1-136-159-00	FILM	0.033uF	5%	50V
C714	1-162-306-11	CERAMIC	0.01uF	30%	16V
C715	1-136-159-00	FILM	0.033uF	5%	50V
C716	1-136-165-00	FILM	0.1uF	5%	50V
C717	1-104-664-11	ELECT	47uF	20%	10V
C718	1-126-964-11	ELECT	10uF	20%	50V
C721	1-130-491-00	MYLAR	0.047uF	5%	50V
C722	1-161-494-00	CERAMIC	0.022uF		25V
C723	1-130-495-00	MYLAR	0.1uF	5%	50V
C724	1-128-241-11	ELECT	220uF	20%	10V
C725	1-162-199-31	CERAMIC	10PF	5%	50V
C726	1-162-294-31	CERAMIC	0.001uF	10%	50V
C727	1-162-306-11	CERAMIC	0.01uF	30%	16V
C728	1-162-306-11	CERAMIC	0.01uF	30%	16V
C729	1-124-589-11	ELECT	47uF	20%	16V
C730	1-104-652-11	ELECT	470uF	20%	10V
C731	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C732	1-130-299-00	FILM	0.012uF	5%	50V
C734	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C741	1-124-589-11	ELECT	47uF	20%	16V
C742	1-137-194-11	FILM	0.47uF	5%	50V
C743	1-162-290-31	CERAMIC	470PF	10%	50V
C744	1-162-286-21	CERAMIC	220PF	10%	50V
C745	1-136-169-00	FILM	0.22uF	5%	50V
C746	1-162-306-11	CERAMIC	0.01uF	30%	16V
C747	1-137-370-11	FILM	0.01uF	5%	50V
C750	1-162-306-11	CERAMIC	0.01uF	30%	16V
C751	1-162-306-11	CERAMIC	0.01uF	30%	16V
C752	1-162-201-31	CERAMIC	12PF	5%	50V
C753	1-162-203-31	CERAMIC	15PF	5%	50V
C754	1-124-589-11	ELECT	47uF	20%	16V
C755	1-162-306-11	CERAMIC	0.01uF	30%	16V
C756	1-162-306-11	CERAMIC	0.01uF	30%	16V
C757	1-162-306-11	CERAMIC	0.01uF	30%	16V
C758	1-162-306-11	CERAMIC	0.01uF	30%	16V
C759	1-162-306-11	CERAMIC	0.01uF	30%	16V
C760	1-162-306-11	CERAMIC	0.01uF	30%	16V
C761	1-162-306-11	CERAMIC	0.01uF	30%	16V
C762	1-162-306-11	CERAMIC	0.01uF	30%	16V
C763	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C764	1-124-259-11	ELECT	4.7uF	20%	16V
C765	1-162-306-11	CERAMIC	0.01uF	30%	16V
C773	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C774	1-124-259-11	ELECT	4.7uF	20%	16V
C782	1-162-294-31	CERAMIC	0.001uF	10%	50V
C787	1-128-241-11	ELECT	220uF	20%	10V
C788	1-162-306-11	CERAMIC	0.01uF	30%	16V
C792	1-162-290-31	CERAMIC	470PF	10%	50V
C793	1-162-290-31	CERAMIC	470PF	10%	50V
C796	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
* CNP701	1-779-466-11	CONNECTOR, FFC/FPC 16P			
* CNP705	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
CNP706	1-691-068-21	HOUSING, CONNECTOR 9P			
		< IC >			
IC701	8-752-074-34	IC CXA1782CQ			
IC702	8-752-372-94	IC CXD2507AQ			
IC703	8-759-473-42	IC BA6898FP			
IC704	8-759-364-34	IC SM5877AM			
		< COIL >			
L701	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L702	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L752	1-410-324-11	INDUCTOR	4.7uH		
L760	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L770	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
		< TRANSISTOR >			
Q701	8-729-195-23	TRANSISTOR 2SA952			
Q703	8-729-900-74	TRANSISTOR DTC143TS			
		< RESISTOR >			
R700	1-249-429-11	CARBON	10K	5%	1/4W
R701	1-249-440-11	CARBON	82K	5%	1/4W
R702	1-247-896-11	CARBON	510K	5%	1/4W
R703	1-249-441-11	CARBON	100K	5%	1/4W
R704	1-247-883-00	CARBON	150K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W
R706	1-247-876-11	CARBON	75K	5%	1/4W
R707	1-249-432-11	CARBON	18K	5%	1/4W
R708	1-247-883-00	CARBON	150K	5%	1/4W
R709	1-247-862-11	CARBON	20K	5%	1/4W
R710	1-249-393-11	CARBON	10	5%	1/4W
R714	1-247-883-00	CARBON	150K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R715	1-249-430-11	CARBON	12K	5%	1/4W
R716	1-249-430-11	CARBON	12K	5%	1/4W
R717	1-249-429-11	CARBON	10K	5%	1/4W
R718	1-247-899-11	CARBON	680K	5%	1/4W
R720	1-247-891-00	CARBON	330K	5%	1/4W
R722	1-249-439-11	CARBON	68K	5%	1/4W
R723	1-249-440-11	CARBON	82K	5%	1/4W
R725	1-249-437-11	CARBON	47K	5%	1/4W
R726	1-249-429-11	CARBON	10K	5%	1/4W
R727	1-249-429-11	CARBON	10K	5%	1/4W
R730	1-249-435-11	CARBON	33K	5%	1/4W
R731	1-247-863-00	CARBON	22K	5%	1/4W
R734	1-249-437-11	CARBON	47K	5%	1/4W
R735	1-249-429-11	CARBON	10K	5%	1/4W
R736	1-249-417-11	CARBON	1K	5%	1/4W
R740	1-247-843-11	CARBON	3.3K	5%	1/4W
R741	1-249-417-11	CARBON	1K	5%	1/4W
R742	1-249-429-11	CARBON	10K	5%	1/4W
R743	1-247-903-00	CARBON	1M	5%	1/4W
R744	1-247-887-00	CARBON	220K	5%	1/4W
R745	1-249-429-11	CARBON	10K	5%	1/4W
R746	1-249-437-11	CARBON	47K	5%	1/4W
R748	1-249-429-11	CARBON	10K	5%	1/4W
R749	1-249-429-11	CARBON	10K	5%	1/4W
R750	1-249-413-11	CARBON	470	5%	1/4W
R751	1-247-807-11	CARBON	100	5%	1/4W
R752	1-249-429-11	CARBON	10K	5%	1/4W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R754	1-249-429-11	CARBON	10K	5%	1/4W
R756	1-249-440-11	CARBON	82K	5%	1/4W
R757	1-249-439-11	CARBON	68K	5%	1/4W
R758	1-249-439-11	CARBON	68K	5%	1/4W
R759	1-249-439-11	CARBON	68K	5%	1/4W
R760	1-249-417-11	CARBON	1K	5%	1/4W
R761	1-249-417-11	CARBON	1K	5%	1/4W
R762	1-249-417-11	CARBON	1K	5%	1/4W
R763	1-249-417-11	CARBON	1K	5%	1/4W
R764	1-249-417-11	CARBON	1K	5%	1/4W
R766	1-249-417-11	CARBON	1K	5%	1/4W
R776	1-249-417-11	CARBON	1K	5%	1/4W
R791	1-247-843-11	CARBON	3.3K	5%	1/4W
		< VARIABLE RESISTOR >			
RV701	1-241-786-11	RES, ADJ, CARBON	22K		
RV702	1-241-786-11	RES, ADJ, CARBON	22K		
RV703	1-223-459-21	RES, ADJ, CERMET	2.2K		
RV704	1-241-786-11	RES, ADJ, CARBON	22K		
		< VIBRATOR >			
X701	1-767-226-11	VIBRATOR, CRYSTAL (16.9344MHz)			

Ref. No.	Part No.	Description			Remark
	1-658-023-31	CD MOTOR BOARD			
		**********			
		< CONNECTOR >			
CNP707	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P			
		< SWITCH >			
S701	1-572-085-11	SWITCH, LEAF (LIMIT)			
*	A-3321-643-A	CONTROL BOARD, COMPLETE			
		**********			
*	3-014-121-01	HOLDER (LCD)			
*	3-014-130-01	SHEET, DIFFUSION			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
		< CAPACITOR >			
C801	1-126-964-11	ELECT	10uF	20%	50V
C802	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V
C803	1-104-664-11	ELECT	47uF	20%	10V
C804	1-162-306-11	CERAMIC	0.01uF	30%	16V
C805	1-104-665-11	ELECT	100uF	20%	10V
C806	1-162-306-11	CERAMIC	0.01uF	30%	16V
C807	1-102-516-11	CERAMIC	27PF	5%	50V
C808	1-102-516-11	CERAMIC	27PF	5%	50V
C809	1-161-494-00	CERAMIC	0.022uF		25V
C810	1-126-964-11	ELECT	10uF	20%	50V
C811	1-104-664-11	ELECT	47uF	20%	10V
C813	1-162-306-11	CERAMIC	0.01uF	30%	16V
C814	1-162-306-11	CERAMIC	0.01uF	30%	16V
C815	1-162-306-11	CERAMIC	0.01uF	30%	16V
C816	1-162-306-11	CERAMIC	0.01uF	30%	16V
C817	1-102-518-11	CERAMIC	33PF	5%	50V
C818	1-102-516-11	CERAMIC	27PF	5%	50V
C819	1-102-516-11	CERAMIC	27PF	5%	50V
C820	1-102-518-11	CERAMIC	33PF	5%	50V
C821	1-162-306-11	CERAMIC	0.01uF	30%	16V
C822	1-162-306-11	CERAMIC	0.01uF	30%	16V
C823	1-162-282-31	CERAMIC	100PF	10%	50V
C824	1-162-282-31	CERAMIC	100PF	10%	50V
C825	1-162-282-31	CERAMIC	100PF	10%	50V
C826	1-162-282-31	CERAMIC	100PF	10%	50V
C827	1-162-282-31	CERAMIC	100PF	10%	50V
C829	1-162-282-31	CERAMIC	100PF	10%	50V
C830	1-162-282-31	CERAMIC	100PF	10%	50V
C831	1-162-282-31	CERAMIC	100PF	10%	50V
C832	1-162-282-31	CERAMIC	100PF	10%	50V
C833	1-162-282-31	CERAMIC	100PF	10%	50V
C834	1-162-282-31	CERAMIC	100PF	10%	50V
C835	1-162-282-31	CERAMIC	100PF	10%	50V
C836	1-162-282-31	CERAMIC	100PF	10%	50V
C837	1-162-282-31	CERAMIC	100PF	10%	50V

CONTROL

Ref. No.	Part No.	Description			Remark
C838	1-162-282-31	CERAMIC	100PF	10%	50V
C839	1-162-306-11	CERAMIC	0.01uF	30%	16V
C841	1-162-306-11	CERAMIC	0.01uF	30%	16V
C842	1-162-306-11	CERAMIC	0.01uF	30%	16V
C843	1-162-306-11	CERAMIC	0.01uF	30%	16V
C844	1-162-306-11	CERAMIC	0.01uF	30%	16V
C845	1-162-282-31	CERAMIC	100PF	10%	50V
C846	1-162-306-11	CERAMIC	0.01uF	30%	16V
C847	1-162-306-11	CERAMIC	0.01uF	30%	16V
C848	1-162-306-11	CERAMIC	0.01uF	30%	16V
C849	1-162-282-31	CERAMIC	100PF	10%	50V
C850	1-162-282-31	CERAMIC	100PF	10%	50V
C851	1-162-282-31	CERAMIC	100PF	10%	50V
C852	1-162-306-11	CERAMIC	0.01uF	30%	16V
C853	1-162-282-31	CERAMIC	100PF	10%	50V
C854	1-162-282-31	CERAMIC	100PF	10%	50V
C855	1-162-282-31	CERAMIC	100PF	10%	50V
C856	1-162-282-31	CERAMIC	100PF	10%	50V
C857	1-162-306-11	CERAMIC	0.01uF	30%	16V
C858	1-126-964-11	ELECT	10uF	20%	50V
C859	1-162-306-11	CERAMIC	0.01uF	30%	16V
C860	1-162-306-11	CERAMIC	0.01uF	30%	16V
C861	1-162-306-11	CERAMIC	0.01uF	30%	16V
C863	1-162-306-11	CERAMIC	0.01uF	30%	16V
C866	1-126-964-11	ELECT	10uF	20%	50V
C867	1-162-306-11	CERAMIC	0.01uF	30%	16V
C868	1-162-306-11	CERAMIC	0.01uF	30%	16V
C869	1-162-306-11	CERAMIC	0.01uF	30%	16V
C901	1-104-664-11	ELECT	47uF	20%	10V
		< CONNECTOR >			
CN801	1-774-493-11	CONNECTOR, FFC/FPC 27P			
CNP802	1-770-389-11	PIN, CONNECTOR (PC BOARD) 5P			
CNP803	1-770-387-11	PIN, CONNECTOR (PC BOARD) 3P			
* CNP804	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CNP805	1-568-852-11	CONNECTOR, FFC/FPC 9P			
		< DIODE >			
D801	8-719-991-33	DIODE 1SS133T-77			
D802	8-719-991-33	DIODE 1SS133T-77			
D803	8-719-991-33	DIODE 1SS133T-77			
D804	8-719-991-33	DIODE 1SS133T-77			
D805	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC801	8-752-904-22	IC CXP83120A-036Q			
IC802	8-759-553-50	IC S-81256PG-Z			
IC803	8-759-511-42	IC S-80730AN			
		< CABLE HOLDER >			
* KH805	1-573-287-11	HOLDER, CABLE 2P			

Ref. No.	Part No.	Description			Remark
		< COIL >			
L801	1-408-117-00	INDUCTOR	10uH		
L802	1-412-832-11	INDUCTOR	1uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-801-786-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q801	8-729-194-57	TRANSISTOR 2SC945-P			
Q802	8-729-922-66	TRANSISTOR 2SC2410SN			
Q803	8-729-922-66	TRANSISTOR 2SC2410SN			
Q804	8-729-900-80	TRANSISTOR DTC114ES			
Q805	8-729-195-23	TRANSISTOR 2SA952			
		< RESISTOR >			
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-417-11	CARBON	1K	5%	1/4W
R803	1-249-417-11	CARBON	1K	5%	1/4W
R804	1-249-417-11	CARBON	1K	5%	1/4W
R805	1-249-417-11	CARBON	1K	5%	1/4W
R806	1-249-417-11	CARBON	1K	5%	1/4W
R807	1-249-429-11	CARBON	10K	5%	1/4W
R808	1-249-417-11	CARBON	1K	5%	1/4W
R809	1-249-417-11	CARBON	1K	5%	1/4W
R810	1-249-417-11	CARBON	1K	5%	1/4W
R811	1-249-417-11	CARBON	1K	5%	1/4W
R812	1-249-429-11	CARBON	10K	5%	1/4W
R813	1-249-429-11	CARBON	10K	5%	1/4W
R814	1-249-429-11	CARBON	10K	5%	1/4W
R815	1-249-417-11	CARBON	1K	5%	1/4W
R816	1-249-429-11	CARBON	10K	5%	1/4W
R818	1-249-417-11	CARBON	1K	5%	1/4W
R819	1-249-417-11	CARBON	1K	5%	1/4W
R820	1-249-417-11	CARBON	1K	5%	1/4W
R821	1-249-417-11	CARBON	1K	5%	1/4W
R822	1-249-429-11	CARBON	10K	5%	1/4W
R823	1-249-429-11	CARBON	10K	5%	1/4W
R824	1-249-417-11	CARBON	1K	5%	1/4W
R825	1-249-417-11	CARBON	1K	5%	1/4W
R826	1-249-413-11	CARBON	470	5%	1/4W
R827	1-249-413-11	CARBON	470	5%	1/4W
R828	1-249-417-11	CARBON	1K	5%	1/4W
R829	1-249-417-11	CARBON	1K	5%	1/4W
R830	1-249-429-11	CARBON	10K	5%	1/4W
R831	1-249-429-11	CARBON	10K	5%	1/4W
R832	1-249-425-11	CARBON	4.7K	5%	1/4W
R833	1-249-425-11	CARBON	4.7K	5%	1/4W
R834	1-249-429-11	CARBON	10K	5%	1/4W
R835	1-249-429-11	CARBON	10K	5%	1/4W
R836	1-249-429-11	CARBON	10K	5%	1/4W
R837	1-249-417-11	CARBON	1K	5%	1/4W
R841	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R842	1-249-429-11	CARBON	10K	5%	1/4W
R843	1-249-429-11	CARBON	10K	5%	1/4W
R844	1-247-863-00	CARBON	22K	5%	1/4W
R845	1-249-411-11	CARBON	330	5%	1/4W
R846	1-249-429-11	CARBON	10K	5%	1/4W
R847	1-249-417-11	CARBON	1K	5%	1/4W
R848	1-249-417-11	CARBON	1K	5%	1/4W
R849	1-249-417-11	CARBON	1K	5%	1/4W
R850	1-249-417-11	CARBON	1K	5%	1/4W
R851	1-249-417-11	CARBON	1K	5%	1/4W
R852	1-249-417-11	CARBON	1K	5%	1/4W
R853	1-249-417-11	CARBON	1K	5%	1/4W
R854	1-249-437-11	CARBON	47K	5%	1/4W
R855	1-249-417-11	CARBON	1K	5%	1/4W
R856	1-249-425-11	CARBON	4.7K	5%	1/4W
R857	1-249-425-11	CARBON	4.7K	5%	1/4W
R858	1-249-425-11	CARBON	4.7K	5%	1/4W
R859	1-249-425-11	CARBON	4.7K	5%	1/4W
R866	1-249-441-11	CARBON	100K	5%	1/4W
R867	1-249-417-11	CARBON	1K	5%	1/4W
R868	1-249-441-11	CARBON	100K	5%	1/4W
R869	1-249-428-11	CARBON	8.2K	5%	1/4W
R872	1-249-429-11	CARBON	10K	5%	1/4W
R873	1-249-437-11	CARBON	47K	5%	1/4W
R877	1-249-437-11	CARBON	47K	5%	1/4W
R880	1-249-437-11	CARBON	47K	5%	1/4W
R881	1-249-437-11	CARBON	47K	5%	1/4W
R882	1-249-425-11	CARBON	4.7K	5%	1/4W
R900	1-249-417-11	CARBON	1K	5%	1/4W
R901	1-249-417-11	CARBON	1K	5%	1/4W
R902	1-249-417-11	CARBON	1K	5%	1/4W
R903	1-249-417-11	CARBON	1K	5%	1/4W
R904	1-249-417-11	CARBON	1K	5%	1/4W
R905	1-249-417-11	CARBON	1K	5%	1/4W
R906	1-249-417-11	CARBON	1K	5%	1/4W
R907	1-249-417-11	CARBON	1K	5%	1/4W
R908	1-249-417-11	CARBON	1K	5%	1/4W
R909	1-249-417-11	CARBON	1K	5%	1/4W
R910	1-249-417-11	CARBON	1K	5%	1/4W
R911	1-249-417-11	CARBON	1K	5%	1/4W
R912	1-249-417-11	CARBON	1K	5%	1/4W
R913	1-249-417-11	CARBON	1K	5%	1/4W
R914	1-249-417-11	CARBON	1K	5%	1/4W
R915	1-249-417-11	CARBON	1K	5%	1/4W
R916	1-249-417-11	CARBON	1K	5%	1/4W
R917	1-249-417-11	CARBON	1K	5%	1/4W
R918	1-249-417-11	CARBON	1K	5%	1/4W
R919	1-249-417-11	CARBON	1K	5%	1/4W
R920	1-249-417-11	CARBON	1K	5%	1/4W
R921	1-249-417-11	CARBON	1K	5%	1/4W
R922	1-249-417-11	CARBON	1K	5%	1/4W
R923	1-249-417-11	CARBON	1K	5%	1/4W
R924	1-249-417-11	CARBON	1K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R925	1-249-417-11	CARBON	1K	5%	1/4W
R926	1-249-417-11	CARBON	1K	5%	1/4W
R927	1-249-417-11	CARBON	1K	5%	1/4W
		< VIBRATOR >			
X801	1-760-105-11	VIBRATOR, CRYSTAL (32.768kHz)			
X802	1-767-184-11	VIBRATOR, CERAMIC (4.19MHz)			
**********					
*	1-662-743-11	HEAD BOARD			
		***********			
**********					
*	1-666-187-11	HEADPHONE BOARD			
		*****************			
		< JACK >			
J301	1-566-891-11	JACK (🎧)			
		< CABLE HOLDER >			
* KH302	1-565-386-11	HOLDER, CABLE 5P			
		< COIL >			
L151	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L251	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
L351	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH		
**********					
*	1-671-068-23	JACK BOARD			
		***********			
		< CAPACITOR >			
C186	1-162-282-31	CERAMIC	100PF	10%	50V
C286	1-162-282-31	CERAMIC	100PF	10%	50V
C384	1-161-494-00	CERAMIC	0.022uF		25V
		< JACK >			
* J501	1-537-405-11	TERMINAL BOARD (2P SP) (SPEAKER OUT			R-ch)
* J502	1-750-178-31	JACK, PIN 2P (SIGNAL INPUT)			
		< CABLE HOLDER >			
* KH511	1-565-385-11	HOLDER, CABLE 4P			
* KH513	1-573-287-11	HOLDER, CABLE 2P			
		< RESISTOR >			
R502	1-249-421-11	CARBON	2.2K	5%	1/4W
R503	1-249-421-11	CARBON	2.2K	5%	1/4W
**********					

LAMP LINE POWER SW

Ref. No.	Part No.	Description			Remark
*	1-666-186-11	LAMP BOARD			
		**********			
		< CABLE HOLDER >			
* KH804	1-573-287-11	HOLDER, CABLE 2P			
		< PILOT LAMP >			
PL801	1-517-474-21	LAMP, PILOT			
PL802	1-517-474-21	LAMP, PILOT			
**********					
*	A-3321-638-A	LINE BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C123	1-162-282-31	CERAMIC	100PF	10%	50V
C125	1-126-964-11	ELECT	10uF	20%	50V
C126	1-126-964-11	ELECT	10uF	20%	50V
C223	1-162-282-31	CERAMIC	100PF	10%	50V
C225	1-126-964-11	ELECT	10uF	20%	50V
C226	1-126-964-11	ELECT	10uF	20%	50V
C318	1-126-963-11	ELECT	4.7uF	20%	50V
C319	1-161-494-00	CERAMIC	0.022uF		25V
C320	1-104-665-11	ELECT	100uF	20%	10V
C321	1-104-664-11	ELECT	47uF	20%	10V
		< DIODE >			
D321	8-719-991-33	DIODE 1SS133T-77			
D322	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC304	8-759-634-51	IC M5218AP			
J331	8-749-921-12	IC GP1F32T (OPTICAL DIGITAL OUT (CD))			
		< JACK >			
J323	1-566-822-21	JACK (LINE IN)			
J332	1-566-822-21	JACK (LINE OUT)			
		< CABLE HOLDER >			
* KH307	1-568-135-21	HOLDER, CABLE 7P			
		< COIL >			
L111	1-412-503-11	INDUCTOR	22uH		
L131	1-412-503-11	INDUCTOR	22uH		
L211	1-412-503-11	INDUCTOR	22uH		
L231	1-412-503-11	INDUCTOR	22uH		
L311	1-412-503-11	INDUCTOR	22uH		
L331	1-412-503-11	INDUCTOR	22uH		
		< TRANSISTOR >			
Q101	8-729-900-74	TRANSISTOR DTC143TS			
Q104	8-729-900-74	TRANSISTOR DTC143TS			
Q201	8-729-900-74	TRANSISTOR DTC143TS			
Q204	8-729-900-74	TRANSISTOR DTC143TS			
		< RESISTOR >			
R120	1-249-441-11	CARBON	100K	5%	1/4W
R121	1-249-441-11	CARBON	100K	5%	1/4W
R122	1-247-843-11	CARBON	3.3K	5%	1/4W
R123	1-247-863-00	CARBON	22K	5%	1/4W
R124	1-249-421-11	CARBON	2.2K	5%	1/4W
R125	1-249-421-11	CARBON	2.2K	5%	1/4W
R220	1-249-441-11	CARBON	100K	5%	1/4W
R221	1-249-441-11	CARBON	100K	5%	1/4W
R222	1-247-843-11	CARBON	3.3K	5%	1/4W
R223	1-247-863-00	CARBON	22K	5%	1/4W
R224	1-249-421-11	CARBON	2.2K	5%	1/4W
R225	1-249-421-11	CARBON	2.2K	5%	1/4W
R308	1-249-425-11	CARBON	4.7K	5%	1/4W
R309	1-249-426-11	CARBON	5.6K	5%	1/4W
R321	1-247-807-11	CARBON	100	5%	1/4W
**********					
*	1-671-064-21	POWER BOARD			
		**********			
	1-533-217-31	HOLDER, FUSE			
		< CAPACITOR >			
C501	1-101-005-00	CERAMIC	22000PF		50V
C502	1-101-005-00	CERAMIC	22000PF		50V
C503	1-101-005-00	CERAMIC	22000PF		50V
C504	1-101-005-00	CERAMIC	22000PF		50V
		< CONNECTOR >			
CNP501	1-564-321-00	PIN, CONNECTOR 2P			
		< DIODE >			
D501	8-719-902-17	DIODE U15G			
D502	8-719-902-17	DIODE U15G			
D503	8-719-902-17	DIODE U15G			
D504	8-719-902-17	DIODE U15G			
		< LFT >			
⚠ FL501	1-402-663-11	TRANSFORMER, LINE FILTER (LFT)			
		< CABLE HOLDER >			
* KH501	1-573-287-11	HOLDER, CABLE 2P			
**********					
*	1-662-742-11	SW BOARD			
		**********			
		< CONNECTOR >			
* CN691	1-564-725-11	PIN, CONNECTOR (SMALL TYPE) 9P			

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		< PHOTO REFLECTOR >			
PH691	1-801-455-11	PHOTO REFLECTOR			
		< RESISTOR >			
R691	1-247-827-11	CARBON	680	5%	1/4W
		< SWITCH >			
S691	1-762-811-11	SWITCH, LEAF (HALF (CASSETTE))			
S694	1-762-811-11	SWITCH, LEAF (REC-REV (ERASE PROOF))			
S695	1-762-811-11	SWITCH, LEAF (REC-FWD (ERASE PROOF))			
S696	1-762-810-11	SWITCH, LEAF (MODE (HEAD POSITION))			
**********					
*	1-666-184-11	SW (A) BOARD			
		**********			
		< CAPACITOR >			
C902	1-162-282-31	CERAMIC	100PF	10%	50V
C903	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
CNP901	1-770-398-11	HOUSING, CONNECTOR (PC BOARD) 5P			
CNP902	1-770-396-11	HOUSING, CONNECTOR (PC BOARD) 3P			
		< IC >			
IC901	8-759-471-49	IC NJL57H400			
		< CABLE HOLDER >			
* KH903	1-573-287-11	HOLDER, CABLE 2P			
		< RESISTOR >			
R950	1-249-415-11	CARBON	680	5%	1/4W
R951	1-249-416-11	CARBON	820	5%	1/4W
R952	1-249-418-11	CARBON	1.2K	5%	1/4W
R953	1-249-420-11	CARBON	1.8K	5%	1/4W
R954	1-247-843-11	CARBON	3.3K	5%	1/4W
R955	1-249-427-11	CARBON	6.8K	5%	1/4W
R956	1-249-415-11	CARBON	680	5%	1/4W
R957	1-249-416-11	CARBON	820	5%	1/4W
R958	1-249-418-11	CARBON	1.2K	5%	1/4W
R959	1-249-420-11	CARBON	1.8K	5%	1/4W
R960	1-247-843-11	CARBON	3.3K	5%	1/4W
R961	1-249-427-11	CARBON	6.8K	5%	1/4W
R962	1-249-415-11	CARBON	680	5%	1/4W
R963	1-249-416-11	CARBON	820	5%	1/4W
R964	1-249-418-11	CARBON	1.2K	5%	1/4W
R965	1-249-420-11	CARBON	1.8K	5%	1/4W
R966	1-247-843-11	CARBON	3.3K	5%	1/4W
R967	1-249-427-11	CARBON	6.8K	5%	1/4W

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
S901	1-692-014-11	SWITCH, KEY BOARD (▶▶)			
S902	1-692-014-11	SWITCH, KEY BOARD (◀◀)			
S903	1-692-014-11	SWITCH, KEY BOARD (► (TAPE))			
S904	1-692-014-11	SWITCH, KEY BOARD (■ (TAPE))			
S905	1-692-014-11	SWITCH, KEY BOARD (◄ (TAPE))			
S906	1-692-014-11	SWITCH, KEY BOARD (●/❚❚ (TAPE))			
S907	1-692-014-11	SWITCH, KEY BOARD (DIR MODE)			
S908	1-692-014-11	SWITCH, KEY BOARD (■ (CD))			
S909	1-692-014-11	SWITCH, KEY BOARD (❚❚ (CD))			
S910	1-692-014-11	SWITCH, KEY BOARD (► (CD))			
S911	1-692-014-11	SWITCH, KEY BOARD (FUNCTION)			
S912	1-692-014-11	SWITCH, KEY BOARD (POWER)			
S913	1-692-014-11	SWITCH, KEY BOARD (DISPLAY/ENTER)			
S914	1-692-014-11	SWITCH, KEY BOARD (VOLUME +)			
S915	1-692-014-11	SWITCH, KEY BOARD (VOLUME –)			
S916	1-692-014-11	SWITCH, KEY BOARD (▶▶I TUNE +)			
S917	1-692-014-11	SWITCH, KEY BOARD (I◀◀ – TUNE)			
S918	1-692-014-11	SWITCH, KEY BOARD (RADIO BAND)			
S919	1-692-014-11	SWITCH, KEY BOARD (PRESET + (RADIO))			
S920	1-692-014-11	SWITCH, KEY BOARD (PRESET – (RADIO))			
**********					
*	1-666-185-11	SW (B) BOARD			
		**********			
		< CABLE HOLDER >			
* KH904	1-573-287-11	HOLDER, CABLE 2P			
		< RESISTOR >			
R970	1-249-415-11	CARBON	680	5%	1/4W
R971	1-249-416-11	CARBON	820	5%	1/4W
		< SWITCH >			
S921	1-692-014-11	SWITCH, KEY BOARD (SOUND)			
S922	1-692-014-11	SWITCH, KEY BOARD (PGM SET/AUTO PRESET)			
S923	1-692-014-11	SWITCH, KEY BOARD (PLAY MODE MONO/ST/ISS)			
**********					
*	1-671-066-23	TERMINAL BOARD			
		**********			
		< CAPACITOR >			
C284	1-130-495-00	MYLAR	0.1uF	5%	50V
C285	1-130-495-00	MYLAR	0.1uF	5%	50V
C381	1-126-946-11	ELECT	6800uF	20%	25V
		< CONNECTOR >			
* CNP503	1-506-946-11	PIN, CONNECTOR 4P			
* CNP504	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CNP505	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			

TERMINAL TUNER

Ref. No.	Part No.	Description			Remark
		< CABLE HOLDER >			
* KH510	1-565-385-11	HOLDER, CABLE 4P			
* KH512	1-573-287-11	HOLDER, CABLE 2P			
		< RESISTOR >			
⚠R283	1-249-385-11	CARBON	2.2	5%	1/6W F
⚠R284	1-249-385-11	CARBON	2.2	5%	1/6W F
**********					
*	A-3321-639-A	TUNER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-162-294-31	CERAMIC	0.001uF	10%	50V
C3	1-162-306-11	CERAMIC	0.01uF	30%	16V
C4	1-162-201-31	CERAMIC	12PF	5%	50V
C5	1-162-203-31	CERAMIC	15PF	5%	50V
C6	1-162-306-11	CERAMIC	0.01uF	30%	16V
C7	1-162-294-31	CERAMIC	0.001uF	10%	50V
C9	1-162-282-31	CERAMIC	100PF	10%	50V
C10	1-162-306-11	CERAMIC	0.01uF	30%	16V
C11	1-104-665-11	ELECT	100uF	20%	10V
C12	1-126-963-11	ELECT	4.7uF	20%	50V
C13	1-162-215-31	CERAMIC	47PF	5%	50V
C15	1-162-306-11	CERAMIC	0.01uF	30%	16V
C16	1-162-306-11	CERAMIC	0.01uF	30%	16V
C17	1-162-306-11	CERAMIC	0.01uF	30%	16V
C18	1-162-843-11	CERAMIC	0.022uF	10%	16V
C19	1-162-843-11	CERAMIC	0.022uF	10%	16V
C20	1-126-964-11	ELECT	10uF	20%	50V
C21	1-126-964-11	ELECT	10uF	20%	50V
C22	1-162-850-11	CERAMIC	0.082uF	10%	16V
C23	1-162-849-11	CERAMIC	0.068uF	10%	16V
C24	1-162-850-11	CERAMIC	0.082uF	10%	16V
C25	1-126-964-11	ELECT	10uF	20%	50V
C26	1-162-288-31	CERAMIC	330PF	10%	50V
C27	1-161-494-00	CERAMIC	0.022uF		25V
C31	1-126-964-11	ELECT	10uF	20%	50V
C32	1-162-306-11	CERAMIC	0.01uF	30%	16V
C40	1-102-518-11	CERAMIC	33PF	5%	50V
C41	1-162-203-31	CERAMIC	15PF	5%	50V
C42	1-162-306-11	CERAMIC	0.01uF	30%	16V
C43	1-162-282-31	CERAMIC	100PF	10%	50V
C44	1-162-306-11	CERAMIC	0.01uF	30%	16V
C45	1-162-306-11	CERAMIC	0.01uF	30%	16V
C48	1-162-294-31	CERAMIC	0.001uF	10%	50V
C49	1-162-294-31	CERAMIC	0.001uF	10%	50V
C50	1-162-294-31	CERAMIC	0.001uF	10%	50V
C51	1-162-306-11	CERAMIC	0.01uF	30%	16V
C52	1-126-964-11	ELECT	10uF	20%	50V
C53	1-162-306-11	CERAMIC	0.01uF	30%	16V
C54	1-126-963-11	ELECT	4.7uF	20%	50V
C55	1-126-961-11	ELECT	2.2uF	20%	50V

Ref. No.	Part No.	Description			Remark
C57	1-161-020-11	CERAMIC	0.039uF	10%	16V
C58	1-162-849-11	CERAMIC	0.068uF	10%	16V
C60	1-162-851-11	CERAMIC	0.1uF	10%	16V
C61	1-162-289-31	CERAMIC	390PF	10%	50V
C62	1-162-203-31	CERAMIC	15PF	5%	50V
C63	1-162-851-11	CERAMIC	0.1uF	10%	16V
C64	1-162-306-11	CERAMIC	0.01uF	30%	16V
C65	1-162-294-31	CERAMIC	0.001uF	10%	50V
C90	1-162-282-31	CERAMIC	100PF	10%	50V
C91	1-162-282-31	CERAMIC	100PF	10%	50V
C93	1-162-282-31	CERAMIC	100PF	10%	50V
C94	1-162-282-31	CERAMIC	100PF	10%	50V
C95	1-162-306-11	CERAMIC	0.01uF	30%	16V
C96	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< FILTER >			
CF1	1-767-355-11	FILTER, CERAMIC			
CF2	1-767-355-11	FILTER, CERAMIC			
CF3	1-767-355-11	FILTER, CERAMIC			
CF4	1-767-096-11	VIBRATOR, CERAMIC			
		< ENCAPSULATED COMPONENT >			
CFT1	1-233-885-11	ENCAPSULATED COMPONENT (AM IF)			
		< CONNECTOR >			
CNP1	1-778-310-11	PLUG, CONNECTOR 2P (AM)			
* CNP2	1-564-187-00	PIN, CONNECTOR (FM)			
CNP3	1-573-844-11	CONNECTOR, BOARD TO BOARD 12P			
		< TRIMMER >			
CT1	1-141-410-11	CAP, ADJ	10PF		
CT2	1-141-410-11	CAP, ADJ	10PF		
		< DIODE >			
D1	8-719-991-33	DIODE 1SS133T-77			
D2	8-719-991-33	DIODE 1SS133T-77			
D3	8-719-918-45	DIODE KV1310			
D4	8-719-918-45	DIODE KV1310			
D5	8-719-050-69	DIODE KV1520N			
D91	8-719-991-33	DIODE 1SS133T-77			
D92	8-719-991-33	DIODE 1SS133T-77			
D93	8-719-991-33	DIODE 1SS133T-77			
D94	8-719-991-33	DIODE 1SS133T-77			
		< BPF >			
FL1	1-236-711-21	FILTER, BAND PASS			
		< IC >			
IC1	8-759-386-02	IC TA2008AN			
IC2	8-759-333-33	IC BU2614			

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Ref. No.	Part No.	Description			Remark
		< COIL >			
L1	1-416-226-11	COIL, FM RF			
L2	1-416-225-11	COIL, FM OSC			
L3	1-416-251-11	COIL, AM RF			
L4	1-416-250-11	COIL, AM OSC			
L40	1-410-527-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q1	8-729-922-66	TRANSISTOR	2SC2410SN		
Q2	8-729-115-80	TRANSISTOR	BA1A4P		
Q3	8-729-115-80	TRANSISTOR	BA1A4P		
Q4	8-729-115-80	TRANSISTOR	BA1A4P		
Q5	8-729-115-80	TRANSISTOR	BA1A4P		
Q8	8-729-029-22	TRANSISTOR	DTA114TSA		
Q9	8-729-904-39	TRANSISTOR	DTC114TS		
Q11	8-729-194-57	TRANSISTOR	2SC945-P		
Q12	8-729-194-57	TRANSISTOR	2SC945-P		
		< RESISTOR >			
R1	1-247-887-00	CARBON	220K	5%	1/4W
R2	1-249-421-11	CARBON	2.2K	5%	1/4W
R3	1-249-441-11	CARBON	100K	5%	1/4W
R4	1-249-431-11	CARBON	15K	5%	1/4W
R10	1-249-403-11	CARBON	68	5%	1/4W
R11	1-249-425-11	CARBON	4.7K	5%	1/4W
R12	1-247-815-00	CARBON	220	5%	1/4W
R13	1-249-407-11	CARBON	150	5%	1/4W
R14	1-249-437-11	CARBON	47K	5%	1/4W
R15	1-249-393-11	CARBON	10	5%	1/4W
R16	1-247-815-00	CARBON	220	5%	1/4W
R17	1-249-421-11	CARBON	2.2K	5%	1/4W
R18	1-249-393-11	CARBON	10	5%	1/4W
R19	1-247-863-00	CARBON	22K	5%	1/4W
R23	1-249-421-11	CARBON	2.2K	5%	1/4W
R24	1-249-411-11	CARBON	330	5%	1/4W
R25	1-249-429-11	CARBON	10K	5%	1/4W
R26	1-249-429-11	CARBON	10K	5%	1/4W
R27	1-249-421-11	CARBON	2.2K	5%	1/4W
R28	1-249-421-11	CARBON	2.2K	5%	1/4W
R29	1-249-421-11	CARBON	2.2K	5%	1/4W
R30	1-249-441-11	CARBON	100K	5%	1/4W
R40	1-249-429-11	CARBON	10K	5%	1/4W
R41	1-249-429-11	CARBON	10K	5%	1/4W
R42	1-249-429-11	CARBON	10K	5%	1/4W
R43	1-249-417-11	CARBON	1K	5%	1/4W
R44	1-249-417-11	CARBON	1K	5%	1/4W
R45	1-249-417-11	CARBON	1K	5%	1/4W
R49	1-249-412-11	CARBON	390	5%	1/4W
R50	1-249-415-11	CARBON	680	5%	1/4W
R51	1-249-429-11	CARBON	10K	5%	1/4W
R52	1-249-421-11	CARBON	2.2K	5%	1/4W
R53	1-247-863-00	CARBON	22K	5%	1/4W
R54	1-249-429-11	CARBON	10K	5%	1/4W
R55	1-249-421-11	CARBON	2.2K	5%	1/4W
R56	1-249-417-11	CARBON	1K	5%	1/4W
R57	1-249-437-11	CARBON	47K	5%	1/4W
R58	1-249-437-11	CARBON	47K	5%	1/4W
R59	1-249-437-11	CARBON	47K	5%	1/4W
R60	1-249-417-11	CARBON	1K	5%	1/4W
R64	1-249-441-11	CARBON	100K	5%	1/4W
R65	1-247-807-11	CARBON	100	5%	1/4W
R90	1-249-429-11	CARBON	10K	5%	1/4W
		< VIBRATOR >			
X1	1-760-130-11	VIBRATOR, CRYSTAL (75kHz)			
**********					
		MISCELLANEOUS			
		**********			
3	1-782-296-11	WIRE, PARALLEL (FFC) (27 CORE)			
102	1-782-294-11	WIRE, PARALLEL (FFC) (9 CORE)			
111	1-452-732-11	MAGNET			
120	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)			
152	X-2626-202-1	CHASSIS ASSY (MB), MOTOR (SPINDLE) (including M701)			
⚠154	8-848-483-05	PICK-UP, OPTICAL KSS-213C/Q-RP			
312	X-3374-496-1	CORD ASSY			
⚠314	1-575-653-11	CORD, POWER (E)			
⚠314	1-769-743-11	CORD, POWER (Canadian)			
319	1-790-161-11	CORD, SPEAKER (L-CH)			
355	1-790-161-11	CORD, SPEAKER (R-CH)			
⚠F501	1-533-623-11	FUSE, GLASS CYLINDERICAL (10A/125V)			
HRPE101	1-500-480-11	HEAD, MAGNETIC (REC/PB/ERASE)			
M691	3-016-425-01	MOTOR ASSY (CAPSTAN/REEL) (including PULLEY)			
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)			
PM691	1-454-806-11	SOLENOID, PLUNGER			
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (⏏ PUSH OPEN/CLOSE)			
SP101	1-505-607-11	SPEAKER (8cm) (L-CH)			
SP201	1-505-607-11	SPEAKER (8cm) (R-CH)			
⚠T501	1-431-354-11	TRANSFORMER, POWER			
**********					
		ACCESSORIES & PACKING MATERIALS			
		**********			
	1-501-594-11	ANTENNA (FM)			
	1-501-843-11	ANTENNA, LOOP (AM)			
	1-590-478-11	CORD, CONNECTION (for AUDIO)			
	3-029-170-01	FOOT (SPEAKER)			
	3-860-142-51	MANUAL, INSTRUCTION (ENGLISH)			
	3-860-142-61	MANUAL, INSTRUCTION (FRENCH) (Canadian)			
	3-860-142-71	MANUAL, INSTRUCTION (SPANISH) (E)			
	4-991-047-01	LID, BATTERY CASE (for RMT-C305A)			
	8-917-598-90	REMOTE COMMANDER RMT-C305A SET			
	X-3374-593-1	CORD (ANTENNA) ASSY			
**********					

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#2	7-685-247-19	SCREW +KTP 3X10 TYPE2 NON-SLIT	
#3	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
#4	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT	
#5	7-685-547-19	SCREW +BTP 3X10 TYPE2 N-S	
#6	7-685-851-04	SCREW +BVTT 2X4 (S)	
#7	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#8	7-682-554-09	SCREW +B 3X25	
#9	7-685-546-19	SCREW +BTP 3X8 TYPE2 N-S	
#10	7-685-881-09	SCREW +BVTT 4X8 (S)	

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